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Dear Business Partner,

### **The Original Dr. N. Gerber – This name stands for quality**

Ever since Gerber Instruments AG was founded by Dr. N. Gerber more than 120 years ago the focus lies on the butyrometers to determine the fat content in milk and dairy products.

In 1892 these glass instruments and the acid butyrometry were developed by Dr. Niklaus Gerber.



It was important for him to be able to establish a reliable and easy-to-use instrument to determine the quality of milk. His method credited the Swiss dairy industry with its international reputation and is worldwide indispensable for laboratories.

Gerber Instruments AG stands today, as it was 120 years ago, as a benchmark of the quality determination in the dairy industry.



This new product catalog for milk analysis includes our comprehensive standard assortment for your quality evaluation in the laboratory.

More than 130'000 items and the latest news and promotions you will also find in our online shop or on the website

[www.gerber-instruments.ch](http://www.gerber-instruments.ch)

We are looking forward to continue with or start a new successful cooperation with you and will be at your service with our skilled and dedicated employees.

Your Gerber-Team

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**List of abbreviations:**

|      |                   |      |                        |
|------|-------------------|------|------------------------|
| w/   | with              | w/o  | without                |
| acc. | according         | Qty  | quantity               |
| e.g. | for example       | rpm  | revolutions per minute |
| RN   | regular neck      | int. | internal               |
| PVC  | polyvinyl chlorid | ext. | extern                 |
| PE   | polyethylen       |      |                        |

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# Contents

| Section  | Page |
|--|------|
| Sampling   | 4    |
| Fat determination according to Gerber              | 7    |
| Accessories Butyrometer                            | 14   |
| Gerber measuring devices                           | 17   |
| Waterbaths   | 19   |
| Gerber Centrifuges                                 | 22   |
| Extraction methods to determine the fat content    | 25   |
| Dry matter and moisture determination              | 28   |
| Specific weight                                    | 33   |
| Detection of added water in milk                   | 40   |
| Cryoscopes   | 41   |
| Special examinations in butter                     | 44   |
| Microbiology                                       | 45   |
| Heat treatment tests                               | 54   |
| Udder control                                      | 55   |
| Reduction test                                     | 56   |
| Sediment test                                      | 57   |
| Acidity determination                              | 58   |
| pH measurement                                     | 61   |
| Conductivity measurement                           | 64   |
| Combi analyzer for pH and conductivity measurement | 66   |
| Detection of fat deterioration                     | 68   |
| Consistency and viscosity                          | 69   |
| Effect of homogenization                           | 71   |
| Special examinations of milk- and other powders    | 72   |
| Physical examinations of whipped cream             | 78   |
| Dairy thermometers                                 | 79   |
| Universal thermometers                             | 80   |
| Electronic thermometers                            | 82   |
| Thermohygrometers                                  | 84   |
| Literature   | 85   |
| Alphabetical index                                 | 86   |
| Index by order numbers                             | 92   |

## Sampling



### Milk Dipper

Nickel plated brass, with valve, sterilizable.

| Order No. | Type           | Qty per unit |
|-----------|----------------|--------------|
| 02.0000   | Volume: 1 ml   | 1            |
| 02.0001   | Volume: 2 ml   | 1            |
| 02.0002   | Volume: 4 ml   | 1            |
| 02.0003   | Volume: 5 ml   | 1            |
| 02.0004   | Volume: 10 ml  | 1            |
| 02.0005   | Volume: 20 ml  | 1            |
| 02.0006   | Volume: 40 ml  | 1            |
| 02.0007   | Volume: 50 ml  | 1            |
| 02.0008   | Volume: 100 ml | 1            |



### Milk Stirrer

Stainless steel, perforated stirring disc.

| Order No. | Type                                | Qty per unit |
|-----------|-------------------------------------|--------------|
| 02.1010   | Ø 13 cm, handle approx. 65 cm long  | 1            |
| 02.1011   | Ø 6.5 cm, handle approx. 51 cm long | 1            |



### Ladle Scoop

Stainless steel, with handle.

| Order No. | Type                            | Qty per unit |
|-----------|---------------------------------|--------------|
| 9.150665  | Ø 70 mm, 90 ml, length 185 mm   | 1            |
| 9.150685  | Ø 90 mm, 200 ml, length 315 mm  | 1            |
| 9.150700  | Ø 100 mm, 220 ml, length 315 mm | 1            |



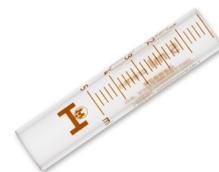
### Dosing Syringes Original Gerber

Exchangeable glass cylinder, sterilizable, Luer Lock adapter and suction cannula (03.13000), stainless steel with ring finger supports.

| Order No. | Type                        | Qty per unit |
|-----------|-----------------------------|--------------|
| 03.1350   | 5 ml cream syringe          | 1            |
| 03.1351   | 10 ml cream syringe         | 1            |
| 03.1352   | 11 ml milk syringe          | 1            |
| 03.1353   | 10.75 ml milk syringe       | 1            |
| 03.1354   | 10.73 ml milk syringe       | 1            |
| 03.1355   | 10.77 ml milk syringe       | 1            |
| 03.13000  | Canula with Luer Lock, bent | 1            |

### Spare Glass Cylinders for Dosing Syringes

| Order No. | Type  | Qty per unit |
|-----------|---|--------------|
| 03.1360   | 5 ml, Ø 15 x 68 mm                                  | 1            |
| 03.1361   | 10 ml, Ø 19 x 76 mm                                 | 1            |
| 03.1362   | 11 ml, Ø 19 x 76 mm                                 | 1            |
| 03.1363   | 10.75 ml, Ø 19 x 76 mm, standard: ISO               | 1            |
| 03.1364   | 10.73 ml, Ø 19 x 76 mm, standard: NOR               | 1            |
| 03.1365   | 10.77 ml, Ø 19 x 76 mm, standard: South Africa, USA | 1            |



### Cannulas with Luer Lock

| Order No. | Type               | Qty per unit |
|-----------|--------------------|--------------|
| 02.1057   | No. 1: 1.0 x 40 mm | 12           |
| 02.1058   | No. 2: 1.2 x 40 mm | 12           |
| 02.1059   | No. 3: 1.4 x 40 mm | 12           |
| 02.1060   | No. 4: 1.6 x 40 mm | 12           |



### Milk Sample Bottles

| Order No. | Type   | Qty per unit |
|-----------|--|--------------|
| 02.11002  | 50 ml, DURAN glass, flat bottom, 4 ring marks at 10/ 20/ 30/ 40 ml | 1            |
| 24.2104   | Rubber stopper for milk sample bottle 02.11002                     | 1            |
| 02.1110   | 50 ml, plastic, with snap cap 02.11101                             | 1            |



02.11002+02.11004

### Bottle Carriers for Milk Sample Bottles

Made of stainless steel, meshes 35 x 35 mm.

| Order No. | Type                            | Qty per unit |
|-----------|---------------------------------|--------------|
| 02.11004  | For 3 x 7 milk sample bottles   | 1            |
| 02.11005  | For 4 x 7 milk sample bottles   | 1            |
| 02.11006  | For 11 x 11 milk sample bottles | 1            |

## Sampling



### Laboratory Bottles

Made of Duran glass, a PP screw cap and pouring ring, can be autoclaved.

| Order No. | Type                               | Qty per unit |
|-----------|------------------------------------|--------------|
| 9.072000  | Content: 50 ml, ISO thread GL 32   | 1            |
| 9.072001  | Content: 100 ml, ISO thread GL 45  | 1            |
| 9.072002  | Content: 250 ml, ISO thread GL 45  | 1            |
| 9.072005  | Content: 500 ml, ISO thread GL 45  | 1            |
| 9.072010  | Content: 1000 ml, ISO thread GL 45 | 1            |
| 9.072007  | Content: 2000 ml, ISO thread GL 45 | 1            |

### Bottle Carriers for Laboratory Bottles

There are a range of laboratory bottles of different sizes, plastic coated steel wire, with feet and fixed handle which will enable the transportation.

| Order No. | Type                    | Qty per unit |
|-----------|-------------------------|--------------|
| 23.1020   | For six 500 ml bottles  | 1            |
| 9.102216  | For six 1000 ml bottles | 1            |
| 9.102206  | For six 2000 ml bottles | 1            |



### Cheese Triers

Made of stainless steel, with plastic handle.

| Order No. | Type  | Qty per unit |
|-----------|---|--------------|
| 02.1200   | Size: 00, blade length: 125 mm, width at end/tip: 9/5 mm  | 1            |
| 02.1201   | Size: 0, blade length: 125 mm, width at end/tip: 11/7 mm  | 1            |
| 02.1202   | Size: 1, blade length: 125 mm, width at end/tip: 13/9 mm  | 1            |
| 02.1203   | Size: 2, blade length: 135 mm, width at end/tip: 19/14 mm | 1            |
| 02.1204   | Size: 3, blade length: 150 mm, width at end/tip: 21/17 mm | 1            |



### Butter Triers

Made of stainless steel, with metal handle.

| Order No. | Type                | Qty per unit |
|-----------|---------------------|--------------|
| 02.1210   | Blade length 260 mm | 1            |
| 02.1211   | Blade length 320 mm | 1            |

### Milk Powder Sampler

Made of stainless steel, with plastic handle.

| Order No. | Type   | Qty per unit |
|-----------|--|--------------|
| 02.1215   | Length 510 mm, penetration depth 360 mm, volume approx. 150 ml | 1            |

## Fat determination according to Gerber

### Milk Butyrometer Original Gerber

With a frosted label on the bulb, plain neck, without a stopper, for milk quantities of 10.73 - 11 ml.

| Order No. | Type  | Acc. code  | Qty per unit |
|-----------|---|------------|--------------|
| 03.0029   | % Fat: 0 - 4; division: 0.05; standard: ISO | A, B, E, F | 1            |
| 03.0030   | % Fat: 0 - 5; division: 0.1; standard: ISO  | A, B, E, F | 1            |
| 03.0001   | % Fat: 0 - 5; division: 0.05                | A, B, E, F | 1            |
| 03.0031   | % Fat: 0 - 6; division: 0.1; standard: ISO  | A, B, E, F | 1            |
| 03.0032   | % Fat: 0 - 7; division: 0.1; standard: ISO  | A, B, E, F | 1            |
| 03.0033   | % Fat: 0 - 8; division: 0.1; standard: ISO  | A, B, E, F | 1            |
| 03.0009   | % Fat: 0 - 9; division: 0.1; standard: ISO  | A, B, E, F | 1            |
| 03.0010   | % Fat: 0 - 10; division: 0.1; standard: ISO | A, B, E, F | 1            |
| 03.0012   | % Fat: 0 - 12; division: 0.1                | A, B, E, F | 1            |
| 03.0014   | % Fat: 0 - 14; division: 0.2                | A, B, E, F | 1            |
| 03.0016   | % Fat: 0 - 16; division: 0.2                | A, B, E, F | 1            |
| 03.0020   | % Fat: 0 - 20; division: 0.2                | A, B, E, F | 1            |
| 03.0025   | % Fat: 0 - 5 - 12; division: 0.1            | A, B, E, F | 1            |



03.0033

### Milk Butyrometer Original Gerber Officially Calibrated

With a frosted label on the bulb, plain neck, without a stopper, for milk quantities of 10.73 - 11 ml.

| Order No. | Type  | Acc. code  | Qty per unit |
|-----------|---|------------|--------------|
| 03.0059   | % Fat: 0 - 5; division: 0.1 ( $\pm 0.05$ ); standard: ISO   | A, B, E, F | 1            |
| 03.0060   | % Fat: 0 - 6; division: 0.1 ( $\pm 0.05$ ); standard: ISO   | A, B, E, F | 1            |
| 03.0061   | % Fat: 0 - 7; division: 0.1 ( $\pm 0.05$ ); standard: ISO   | A, B, E, F | 1            |
| 03.0062   | % Fat: 0 - 8; division: 0.1 ( $\pm 0.05$ ); standard: ISO   | A, B, E, F | 1            |
| 03.0070   | % Fat: 0 - 4; division: 0.05 ( $\pm 0.025$ ); standard: ISO | A, B, E, F | 1            |
| 03.0071   | % Fat: 0 - 6; division: 0.1 ( $\pm 0.03$ )                  | A, B, E, F | 1            |
| 03.0072   | % Fat: 0 - 7; division: 0.1 ( $\pm 0.03$ )                  | A, B, E, F | 1            |



03.0070

### Precision Milk Butyrometer

With a frosted label on the bulb, plain neck, without a stopper, for milk quantities of 10.73 - 11 ml, accuracy of scale  $\pm 0.03\%$ .

| Order No. | Type                             | Acc. code  | Qty per unit |
|-----------|----------------------------------|------------|--------------|
| 03.0043   | % Fat: 0 - 3 - 6; division: 0.05 | A, B, E, F | 1            |
| 03.0200   | % Fat: 0 - 6 - 9; division: 0.05 | A, B, E, F | 1            |



03.0043

## Fat determination according to Gerber



03.0086

### Milk Butyrometer according to National Standards

With a frosted label on the bulb, plain neck, without a stopper.

| Order No. | Type   | Acc. code  | Qty per unit |
|-----------|--|------------|--------------|
| 03.0080   | % Fat: 0 - 8; division: 0.1 ( $\pm$ 0.05);<br>standard: USA                    | A, B, E, F | 1            |
| 03.0081   | % Fat: 0 - 8; division: 0.1 ( $\pm$ 0.05);<br>standard: BS696, numbered        | A, B, E, F | 1            |
| 03.0082   | % Fat: 0 - 8; division: 0.1 ( $\pm$ 0.05);<br>standard: IRISH, numbered        | A, B, E, F | 1            |
| 03.0083   | % Fat: 0 - 6; division: 0.1 ( $\pm$ 0.05);<br>standard: FINN                   | A, B, E, F | 1            |
| 03.0084   | % Fat: 0 - 7; division: 0.1 ( $\pm$ 0.05);<br>standard: FINN                   | A, B, E, F | 1            |
| 03.0086   | % Fat: 0 - 8; division: 0.1 ( $\pm$ 0.03);<br>standard: South Africa, numbered | A, B, E, F | 1            |
| 03.0087   | % Fat: 0 - 6; division: 0.1 ( $\pm$ 0.05);<br>standard: BELG                   | A, B, E, F | 1            |
| 03.0088   | % Fat: 0 - 7; division: 0.1 ( $\pm$ 0.05);<br>standard: BELG                   | A, B, E, F | 1            |
| 03.0089   | % Fat: 0 - 8; division: 0.1 ( $\pm$ 0.05);<br>standard: BELG                   | A, B, E, F | 1            |
| 03.0090   | % Fat: 0 - 4; division: 0.1 ( $\pm$ 0.025);<br>standard: BS696, numbered       | A, B, E, F | 1            |



03.0108

### Milk Butyrometer

With a frosted label on the bulb, ring neck, without a stopper, for milk quantities of 10.73 - 11 ml, accuracy of scale  $\pm$  0.05%.

| Order No. | Type  | Acc. code | Qty per unit |
|-----------|---|-----------|--------------|
| 03.0105   | % Fat: 0 - 5; division: 0.1; standard: ISO  | E, F      | 1            |
| 03.0106   | % Fat: 0 - 6; division: 0.1; standard: ISO  | E, F      | 1            |
| 03.0107   | % Fat: 0 - 7; division: 0.1; standard: ISO  | E, F      | 1            |
| 03.0108   | % Fat: 0 - 8; division: 0.1; standard: ISO  | E, F      | 1            |
| 03.0109   | % Fat: 0 - 9; division: 0.1; standard: ISO  | E, F      | 1            |
| 03.0110   | % Fat: 0 - 10; division: 0.1; standard: ISO | E, F      | 1            |
| 03.0114   | % Fat: 0 - 14; division: 0.2                | E, F      | 1            |

### Skim Milk Butyrometer with Accessories

With a frosted label on the bulb, with a stopper 03.0920, the second stopper has to be ordered separately.

| Order No. | Type   | Acc. code  | Qty per unit |
|-----------|--|------------|--------------|
| 03.0230   | % Fat: 0 - 1; division: 0.01; milk: 10.73 - 11 ml;<br>open bulb, ring neck; Sichler  | A, B, E, F | 1            |
| 03.0231   | % Fat: 0 - 1; division: 0.01; milk: 10.73 - 11 ml;<br>open bulb, plain neck; Sichler | A, B, E, F | 1            |

## Fat determination according to Gerber

### Skim Milk Butyrometer without Accessories

With a frosted label on the bulb.

| Order No. | Type  | Acc. code     | Qty per unit |
|-----------|---|---------------|--------------|
| 03.0211   | % Fat: 0 - 0.5; division: 0.02; milk: 43.5 ml ( $\pm$ 0.5); closed bulb, plain neck, Siegfeld | A, B, E, F    | 1            |
| 03.0221   | % Fat: 0 - 1; division: 0.01; milk: 10.73 - 11 ml; closed bulb, plain neck, Sichler           | A, B, E, F    | 1            |
| 03.02300  | % Fat: 0 - 1; division: 0.01; milk: 10.73 - 11 ml; open bulb, ring neck, Sichler.             | A, B, E, F, G | 1            |
| 03.02310  | % Fat: 0 - 1; division: 0.01; milk: 10.73 - 11 ml; open bulb, plain neck, Sichler             | A, B, E, F, G | 1            |



03.0221

### Cream and Ice Cream Butyrometer Koehler Gerber Standard

Volumetric method for 5 ml cream, with a frosted label on the bulb, plain neck, without a stopper.

| Order No. | Type                                       | Acc. code  | Qty per unit |
|-----------|--|------------|--------------|
| 03.0303   | % Fat: 0 - 30; division: 0.5 ( $\pm$ 0.25) | A, B, E, F | 1            |
| 03.0304   | % Fat: 0 - 40; division: 0.5 ( $\pm$ 0.25) | A, B, E, F | 1            |
| 03.0305   | % Fat: 0 - 50; division: 0.5 ( $\pm$ 0.25) | A, B, E, F | 1            |
| 03.0306   | % Fat: 0 - 50; division: 1.0 ( $\pm$ 0.5)  | A, B, E, F | 1            |
| 03.0307   | % Fat: 0 - 60; division: 1.0 ( $\pm$ 0.5)  | A, B, E, F | 1            |
| 03.0308   | % Fat: 0 - 70; division: 1.0 ( $\pm$ 0.5)  | A, B, E, F | 1            |
| 03.0309   | % Fat: 0 - 80; division: 1.0 ( $\pm$ 0.5)  | A, B, E, F | 1            |



03.0308

### Cream Butyrometer Koehler Gerber Standard

Volumetric method for 5 ml cream, with a frosted label on the bulb, ring neck, without a stopper.

| Order No. | Type                                       | Acc. code | Qty per unit |
|-----------|--|-----------|--------------|
| 03.0314   | % Fat: 0 - 40; division: 0.5 ( $\pm$ 0.25) | E, F      | 1            |
| 03.0315   | % Fat: 0 - 50; division: 0.5 ( $\pm$ 0.25) | E, F      | 1            |
| 03.0317   | % Fat: 0 - 60; division: 1.0 ( $\pm$ 0.5)  | E, F      | 1            |
| 03.0318   | % Fat: 0 - 70; division: 1.0 ( $\pm$ 0.5)  | E, F      | 1            |
| 03.0319   | % Fat: 0 - 80; division: 1.0 ( $\pm$ 0.5)  | E, F      | 1            |



03.0315

### Cream Butyrometer Koehler according to National Standards

Volumetric method for 5 ml cream, with a frosted label on the bulb, plain neck, without a stopper.

| Order No. | Type  | Acc. code  | Qty per unit |
|-----------|---|------------|--------------|
| 03.0326   | % Fat: 0 - 50; division: 0.5 ( $\pm$ 0.25); standard: NOR | A, B, E, F | 1            |
| 03.0327   | % Fat: 0 - 50; division: 1.0 ( $\pm$ 0.5); standard: BELG | A, B, E, F | 1            |



03.0327

## Fat determination according to Gerber



03.0332

### Ice Cream Butyrometer Koehler

Volumetric method for 5 ml cream, with a frosted label on the bulb, plain neck, without a stopper.

| Order No. | Type                         | Acc. code  | Qty per unit |
|-----------|------------------------------|------------|--------------|
| 03.0331   | % Fat: 0 - 15; division: 0.2 | A, B, E, F | 1            |
| 03.0332   | % Fat: 0 - 20; division: 0.2 | A, B, E, F | 1            |
| 03.0333   | % Fat: 0 - 25; division: 0.2 | A, B, E, F | 1            |

### Cream Butyrometer Roeder with Accessories

Weighing method for 5 g cream, with 2 openings, with a frosted label on the bulb, completed with matching rubber stoppers (03.0920/ 03.0925) and a glass beaker without a hole (03.0930).

| Order No. | Type  | Qty per unit |
|-----------|---|--------------|
| 03.0403   | % Fat: 0 - 20 - 40; division: 0.2 ( $\pm$ 0.1); standard: CH                                  | 1            |
| 03.0404   | % Fat: 0 - 20 - 40; division: 0.2 ( $\pm$ 0.1); standard: CH; officially calibrated; numbered | 1            |
| 03.0410   | % Fat: 0 - 40; division: 0.5 ( $\pm$ 0.25); standard: DIN                                     | 1            |
| 03.0411   | % Fat: 0 - 40; division: 0.5 ( $\pm$ 0.25); standard: DIN; officially calibrated              | 1            |
| 03.0412   | % Fat: 0 - 50; division: 0.5 ( $\pm$ 0.25)  | 1            |
| 03.0414   | % Fat: 0 - 60; division: 1.0 ( $\pm$ 0.5)   | 1            |
| 03.0415   | % Fat: 0 - 70; division: 1.0 ( $\pm$ 0.5)   | 1            |
| 03.0416   | % Fat: 0 - 20 - 50; division: 0.5 ( $\pm$ 0.25)   | 1            |
| 03.0417   | % Fat: 0 - 35 - 65; division: 0.5 ( $\pm$ 0.25)   | 1            |
| 03.0418   | % Fat: 0 - 30 - 55; division: 0.5 ( $\pm$ 0.25); standard: DIN                                | 1            |
| 03.0420   | % Fat: 0 - 50 - 75; division: 0.5 ( $\pm$ 0.25); standard: DIN                                | 1            |



03.04140

### Cream Butyrometer Roeder without Accessories

Weighing method for 5 g cream, with 2 openings, with a frosted label on the bulb.

| Order No. | Type  | Acc. code | Qty per unit |
|-----------|---|-----------|--------------|
| 03.04030  | % Fat: 0 - 20 - 40; division: 0.2 ( $\pm$ 0.1); standard: CH                                  | G, H, J   | 1            |
| 03.04040  | % Fat: 0 - 20 - 40; division: 0.2 ( $\pm$ 0.1); standard: CH; officially calibrated; numbered | G, H, J   | 1            |
| 03.04100  | % Fat: 0 - 40; division: 0.5 ( $\pm$ 0.25); standard: DIN                                     | G, H, J   | 1            |
| 03.04110  | % Fat: 0 - 40; division: 0.5 ( $\pm$ 0.25); standard: DIN; officially calibrated              | G, H, J   | 1            |
| 03.04120  | % Fat: 0 - 50; division: 0.5 ( $\pm$ 0.25)  | G, H, J   | 1            |
| 03.04140  | % Fat: 0 - 60; division: 1.0 ( $\pm$ 0.5)   | G, H, J   | 1            |
| 03.04150  | % Fat: 0 - 70; division: 1.0 ( $\pm$ 0.5)   | G, H, J   | 1            |
| 03.04160  | % Fat: 0 - 20 - 50; division: 0.5 ( $\pm$ 0.25)   | G, H, J   | 1            |
| 03.04170  | % Fat: 0 - 35 - 65; division: 0.5 ( $\pm$ 0.25)   | G, H, J   | 1            |
| 03.04180  | % Fat: 0 - 30 - 55; division: 0.5 ( $\pm$ 0.25); standard: DIN                                | G, H, J   | 1            |
| 03.04200  | % Fat: 0 - 50 - 75; division: 0.5 ( $\pm$ 0.25); standard: DIN                                | G, H, J   | 1            |

## Fat determination according to Gerber

### Butyrometer for Condensed Milk and Ice Cream Roeder w/ Acc.

Weighing method for 5 g cream, with 2 openings, with a frosted label on the bulb, completed with matching rubber stoppers (03.0920/ 03.0925) and a glass beaker without hole (03.0930).

| Order No. | Type                             | Qty per unit |
|-----------|----------------------------------|--------------|
| 03.0430   | % Fat: 0 - 20; division: 0.2     | 1            |
| 03.0431   | % Fat: 0 - 12; division: 0.2     | 1            |
| 03.0432   | % Fat: 0 - 6 - 12; division: 0.1 | 1            |

### Butyrometer for Condensed Milk and Ice Cream Roeder w/o Acc.

Weighing method for 5 g cream, with 2 openings, with a frosted label on the bulb, accuracy of sale  $\pm 0.01\%$ .

| Order No. | Type                             | Acc. code | Qty per unit |
|-----------|----------------------------------|-----------|--------------|
| 03.04300  | % Fat: 0 - 20; division: 0.2     | G, H, J   | 1            |
| 03.04310  | % Fat: 0 - 12; division: 0.2     | G, H, J   | 1            |
| 03.04320  | % Fat: 0 - 6 - 12; division: 0.1 | G, H, J   | 1            |



03.04310

### Ice Cream Butyrometer APHA-SMEDP 13 SPEC

Weighing method for 5 g ice cream, with closed bulb with a frosted label, without a stopper, numbered.

| Order No. | Type                         | Acc. code  | Qty per unit |
|-----------|------------------------------|------------|--------------|
| 03.0440   | % Fat: 0 - 15; division: 0.2 | A, B, E, F | 1            |
| 03.0441   | % Fat: 0 - 20; division: 0.2 | A, B, E, F | 1            |
| 03.0442   | % Fat: 0 - 25; division: 0.2 | A, B, E, F | 1            |



03.0441

### Cream Butyrometer according to National Standards

Weighing method for 5 g cream, with closed bulb with a frosted label, plain neck  $\varnothing 11/12$  mm, without a stopper.

| Order No. | Type   | Acc. code  | Qty per unit |
|-----------|--|------------|--------------|
| 03.0450   | % Fat: 0 - 70; division: 1.0 ( $\pm 0.5$ ); standard: BS696; numbered  | A, B, E, F | 1            |
| 03.0451   | % Fat: 0 - 50; division: 0.5 ( $\pm 0.25$ ); standard: USA; numbered   | A, B, E, F | 1            |
| 03.0452   | % Fat: 0 - 40; division: 0.5 ( $\pm 0.25$ ); standard: DIN Schulz      | A, B, E, F | 1            |
| 03.0453   | % Fat: 0 - 70; division: 1.0 ( $\pm 0.25$ ); standard: IRISH; numbered | A, B, E, F | 1            |



03.0451

## Fat determination according to Gerber

### Cheese Butyrometer Van Gulik with Accessories

Weighing method for 3 g cheese, with two openings, with a frosted label on the bulb, completed with matching rubber stoppers (03.0920/ 03.0925) and glass beaker with 16 holes (03.0932).

| Order No. | Type   | Qty per unit |
|-----------|--|--------------|
| 03.0520   | % Fat: 0 - 20; division: 0.2                                       | 1            |
| 03.0540   | % Fat: 0 - 40; division: 0.5                                       | 1            |
| 03.0541   | % Fat: 0 - 40; division: 0.5; officially calibrated                | 1            |
| 03.0542   | % Fat: 0 - 40; division: 0.5; standard: ISO                        | 1            |
| 03.0543   | % Fat: 0 - 40; division: 0.5; standard: ISO; officially calibrated | 1            |

### Cheese Butyrometer Van Gulik without Accessories

Weighing method for 3 g cheese, with two openings, with a frosted label on the bulb.

| Order No. | Type   | Acc. code | Qty per unit |
|-----------|--|-----------|--------------|
| 03.05200  | % Fat: 0 - 20; division: 0.2                                       | G, H, L   | 1            |
| 03.05400  | % Fat: 0 - 40; division: 0.5                                       | G, H, L   | 1            |
| 03.05410  | % Fat: 0 - 40; division: 0.5; officially calibrated                | G, H, L   | 1            |
| 03.05420  | % Fat: 0 - 40; division: 0.5; standard: ISO                        | G, H, L   | 1            |
| 03.05430  | % Fat: 0 - 40; division: 0.5; standard: ISO; officially calibrated | G, H, L   | 1            |



03.05420

### Cheese Butyrometer according to BS and IS

Weighing method, with closed bulb with a frosted label, plain neck Ø 11 mm.

| Order No. | Type   | Acc. code  | Qty per unit |
|-----------|--|------------|--------------|
| 03.0551   | % Fat: 0 - 40; division: 1.0; standard: BS696; numbered      | A, B, E, F | 1            |
| 03.0552   | % Fat: 0 - 40; division: 1.0; standard: IS 69/1955; numbered | A, B, E, F | 1            |



03.0551

## Fat determination according to Gerber

### Butter Butyrometer with Accessories

Weighing method for 5 g butter, with two openings, with a frosted label on the bulb, completed with matching rubber stoppers (03.0920/ 03.0925) and a glass beaker with two holes (03.0931).

| Order No. | Type  | Qty per unit |
|-----------|---|--------------|
| 03.0610   | % Fat: 0 - 70 - 90; division: 0.5 ( $\pm$ 0.25); standard: DIN                        | 1            |
| 03.0611   | % Fat: 0 - 70 - 90; division: 0.5 ( $\pm$ 0.25); standard: DIN; officially calibrated | 1            |
| 03.0620   | % Fat: 0 - 100; division: 1.0 ( $\pm$ 0.5)  | 1            |

### Butter Butyrometer without Accessories

Weighing method for 5 g butter, with two openings, with a frosted label on the bulb.

| Order No. | Type  | Acc. code  | Qty per unit |
|-----------|---|------------|--------------|
| 03.06100  | % Fat: 0 - 70 - 90; division: 0.5 ( $\pm$ 0.25); standard: DIN                        | G, H, K    | 1            |
| 03.06110  | % Fat: 0 - 70 - 90; division: 0.5 ( $\pm$ 0.25); standard: DIN; officially calibrated | G, H, K    | 1            |
| 03.06200  | % Fat: 0 - 100; division: 1.0 ( $\pm$ 0.5)  | G, H, J, K | 1            |



03.06100

### Dry Milk Butyrometer Teichert with Accessories

Weighing method for 2.5 g dry milk, with closed bulb with a frosted label, neck  $\varnothing$  17/18 mm, completed with a matching rubber stopper (03.0925) and a glassnail (03.0933).

| Order No. | Type                                       | Qty per unit |
|-----------|--|--------------|
| 03.0735   | % Fat: 0 - 35; division: 0.5 ( $\pm$ 0.25) | 1            |
| 03.0770   | % Fat: 0 - 70; division: 1.0 ( $\pm$ 0.5)  | 1            |

### Dry Milk Butyrometer Teichert without Accessories

Weighing method for 2.5 g dry milk, with closed bulb with a frosted label, neck  $\varnothing$  17/18 mm.

| Order No. | Type                                       | Acc. code | Qty per unit |
|-----------|--|-----------|--------------|
| 03.07350  | % Fat: 0 - 35; division: 0.5 ( $\pm$ 0.25) | H, M, N   | 1            |
| 03.07700  | % Fat: 0 - 70; division: 1.0 ( $\pm$ 0.5)  | H, M, N   | 1            |



03.07700

### Test Certificate for Butyrometers

| Order No. | Type   | Qty per unit |
|-----------|--|--------------|
| 03.0400   | Test certificate Gerber Instruments for butyrometers | 1            |

## Accessories Butyrometer



03.0900

### Gerbal Stoppers

| Order No. | Type  | Accessories | Qty per unit |
|-----------|---|-------------|--------------|
| 03.0900   | GERBAL M stopper with a sleeve<br>length: 23.5 mm | Code: A     | 1            |
| 03.0905   | GERBAL F stopper with a ball<br>length: 21.0 mm   | Code: C     | 1            |



03.0902

### Regulating Pins for Gerbal Stoppers

| Order No. | Type  | Accessories | Qty per unit |
|-----------|---|-------------|--------------|
| 03.0902   | For GERBAL M Stopper<br>nickel plated brass | Code: B     | 1            |
| 03.0906   | For GERBAL F Stopper<br>nickel plated brass | Code: D     | 1            |



03.0910

### Conical Rubber Stoppers

For milk-, skim milk- and cream butyrometers acc. to Koehler.

| Order No. | Type  | Accessories | Qty per unit |
|-----------|---|-------------|--------------|
| 03.0910   | Double conical<br>dimensions: Ø 12/14 x 36 mm | Code: E     | 1            |
| 03.0915   | Single conical<br>dimensions: Ø 11/16 x 35 mm | Code: F     | 1            |



03.0925

### Conical Rubber Stoppers

For butyrometers with two openings.

| Order No. | Type   | Accessories | Qty per unit |
|-----------|--|-------------|--------------|
| 03.0920   | Small, single conical<br>dimensions: Ø 10.5/13 x 15 mm                         | Code: G     | 1            |
| 03.0925   | Big, single conical, with a hole for a beaker<br>dimensions: Ø 17.5/22 x 30 mm | Code: H     | 1            |
| 03.0926   | Big, single conical, without a hole<br>dimensions: Ø 17.5/22 x 30 mm           | Code: I     | 1            |



03.0931

### Glass Beaker

| Order No. | Type                                  | Accessories | Qty per unit |
|-----------|---------------------------------------|-------------|--------------|
| 03.0930   | Without a hole for cream butyrometers | Code: J     | 1            |
| 03.0931   | With 2 holes for butter butyrometers  | Code: K     | 1            |
| 03.0932   | With 16 holes for cheese butyrometers | Code: L     | 1            |

## Accessories Butyrometer

### Glass Nail

| Order No. | Type                             | Accessories | Qty per unit |
|-----------|----------------------------------|-------------|--------------|
| 03.0933   | For the milk powder butyrometers | Code: M     | 1            |



### Glass Weighing Funnels

| Order No. | Type                            | Accessories | Qty per unit |
|-----------|---------------------------------|-------------|--------------|
| 03.0935   | Weighing funnel for milk powder | Code: N     | 1            |
| 03.0936   | Weighing funnel for butter      | Code: O     | 1            |



03.0935

### Butyrometer Reading Stand

Convenient and accurate reading of the scale thanks to evenly distributed lightning with 80 LED lights.  
Voltage: 110-230 VAC/50-60 Hz.

| Order No. | Type                   | Qty per unit |
|-----------|------------------------|--------------|
| 03.9500   | For wall mounting      | 1            |
| 03.9501   | For table top mounting | 1            |

### Butyrometer Racks

Heat and acid resistant.

| Order No. | Type   | Qty per unit |
|-----------|--|--------------|
| 03.1500   | For 12 butyrometers (polypropylene), 2 x 6 positions<br>(WxDxH) 220 x 80 x 150 mm, 2 handles H=45 mm | 1            |
| 03.1550   | For 36 butyrometers (aluminum), 6 x 6 positions<br>(WxDxH) 265 x 265 x 150 mm, 1 handle H=60 mm      | 1            |
| 03.1560   | For 36 butyrometers (aluminum), 3 x 12 positions<br>(WxDxH) 410 x 105 x 155 mm                       | 1            |



03.1500+03.1521

### Shaking Cover

| Order No. | Type                                      | Qty per unit |
|-----------|---|--------------|
| 03.1521   | For butyrometer rack 03.1500, made of PVC | 1            |

## Accessories Butyrometer



25.0001

### Cleaning Brush for Butyrometer Scale

| Order No. | Type                              | Qty per unit |
|-----------|-----------------------------------|--------------|
| 25.0001   | Ø 9 x 4 mm, length approx. 260 mm | 1            |

### Cleaning Brush for Butyrometer Body

| Order No. | Type                           | Qty per unit |
|-----------|--------------------------------|--------------|
| 25.0002   | Ø 30 mm, length approx. 270 mm | 1            |

### Safety Eyeshield



These innovative protective spectacles are designed to perfectly fit the face. Their flexible side arms with variable inclination can be individually adjusted accordingly, while the integrated sofflex zone ensures outstanding comfort to any head sizes.

Lens: PC clear UV 2C-1.2.

Scratch-resistant and non-fogging on the inside, and the outside is extremely scratchproof, resistant to chemicals and it can be cleaned with great ease thanks to nano-technology.

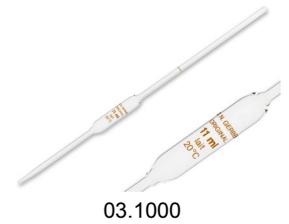
| Order No. | Type   | Qty per unit |
|-----------|--|--------------|
| 6.253649  | Safety eyeshield i-3 - 9190, anthracite/blue | 1            |

**More eyeshields are available in our online shop**

Gerber measuring devices

**Milk Pipets**

| Order No. | Type   | Qty per unit |
|-----------|--|--------------|
| 03.1000   | 11.00 ml                                       | 1            |
| 03.1001   | 11.00 ml, officially calibrated                | 1            |
| 03.1002   | 11.00 ml, standard: BELG                       | 1            |
| 03.1003   | 10.75 ml, standard: DIN                        | 1            |
| 03.1004   | 10.75 ml, standard: DIN, officially calibrated | 1            |
| 03.1005   | 10.94 ml, standard: BS 696                     | 1            |
| 03.1006   | 10.77 ml, standard: South Africa, USA          | 1            |
| 03.1007   | 10.80 ml, standard: IRISH                      | 1            |
| 03.1008   | 10.73 ml, standard: NOR                        | 1            |
| 03.1010   | 10 ml  | 1            |



**Cream Pipets**

| Order No. | Type                        | Qty per unit |
|-----------|-----------------------------|--------------|
| 03.1020   | 5 ml, 20 °C                 | 1            |
| 03.1021   | 5 ml, 40 °C, standard: BELG | 1            |
| 03.1022   | 5 ml, 20 °C, standard: NOR  | 1            |



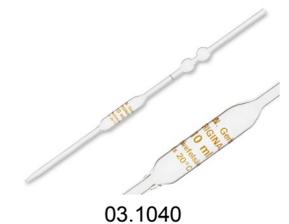
**Water Pipette**

| Order No. | Type | Qty per unit |
|-----------|------|--------------|
| 03.1030   | 5 ml | 1            |



**Sulfuric Acid Pipets**

| Order No. | Type   | Qty per unit |
|-----------|--|--------------|
| 03.1040   | 10.0 ml, with 2 bulbs                        | 1            |
| 03.1041   | 10.0 ml, with 2 bulbs, officially calibrated | 1            |
| 03.1042   | 17.5 ml, with 2 bulbs, for weighing method   | 1            |
| 03.1043   | 17.6 ml, with 2 bulbs, for weighing method   | 1            |



**Amyl Alcohol Pipette**

| Order No. | Type              | Qty per unit |
|-----------|-------------------|--------------|
| 03.1050   | 1 ml, with 1 bulb | 1            |



## Gerber measuring devices



03.1111

### Tilt Measures Superior

Without moveable parts, with a rubber stopper (03.11002), without a bottle.

| Order No. | Type                    | Qty per unit |
|-----------|-------------------------|--------------|
| 03.1111   | 1 ml for amyl alcohol   | 1            |
| 03.1112   | 10 ml for sulfuric acid | 1            |

### Accessories for Tilt Measures Superior

| Order No. | Type  | Qty per unit |
|-----------|---|--------------|
| 21.2702   | Narrow neck reagent bottle 250 ml, lime soda glass, with a PE stopper | 1            |
| 03.11002  | Spare rubber stopper with 10 mm hole                                  | 1            |



03.1201

### Automatic Measures Permanent

With RN glass stopper and tab.

| Order No. | Type                    | Qty per unit |
|-----------|-------------------------|--------------|
| 03.1201   | 1 ml for amyl alcohol   | 1            |
| 03.1202   | 10 ml for sulfuric acid | 1            |



### Support for Permanent Automat Double

| Order No. | Type   | Qty per unit |
|-----------|--|--------------|
| 03.1231   | Included in the delivery:<br>- 03.12311 Base plate<br>- 23.0096 Tripod rod<br>- 23.0137 Tripod ring Ø 100 mm<br>- 03.12313 Tripod ring Ø 80 mm<br>- 03.12315 Drip dish | 1            |

### Support for Permanent Automat 1 ml Single

| Order No. | Type   | Qty per unit |
|-----------|--|--------------|
| 03.1230-1 | Included in the delivery:<br>- 03.12303 Base plate<br>- 23.0095 Tripod rod<br>- 03.12313 Tripod ring Ø 80 mm<br>- 03.12315 Drip dish | 1            |

### Support for Permanent Automat 10 ml Single

| Order No.  | Type   | Qty per unit |
|------------|--|--------------|
| 03.1230-10 | Included in the delivery:<br>- 03.12303 Base plate<br>- 23.0095 Tripod rod<br>- 23.0137 Tripod ring Ø 100 mm<br>- 03.12315 Drip dish | 1            |

## Waterbath Pot

All made of aluminum, requires separate heat source, e.g. hot plate or Bunsen burner.

| Order No. | Type  | Qty per unit |
|-----------|---|--------------|
| 03.9031   | For 8 butyrometers<br>Included in the delivery:<br>- 03.90310 Waterbath<br>- 03.90342 Rack for 8 butyrometers   | 1            |
| 03.9034   | For 16 butyrometers<br>Included in the delivery:<br>- 03.90340 Waterbath<br>- 03.90341 Rack for 16 butyrometers | 1            |



## Accessories for Waterbath Pot

| Order No. | Type  | Qty per unit |
|-----------|---|--------------|
| 10.1010   | Waterbath-thermometer, mercury filled, graduated every 1 °C, measuring range -10 to +100 °C | 1            |
| 33.1200   | Hotplate with stepless temperature control, hotplate Ø 180 mm, 2000 W, 230 VAC              | 1            |
| 7.672290  | Ceran® single boiling plate, Ø 80 - 200 mm, 2200 W, 230 VAC                                 | 1            |

## Waterbath Butytherm Mini

To preheat the butyrometers in front of the centrifuging and to adjust the butyrometers at 65 °C for the circle reads.

Specifications:

- Material: Bath of stainless steel
- Capacity: approx. 8 liters
- Int. dimensions (WxDxH): 30 x 15 x 20 cm
- Thermostat: to approx. 90 °C
- Heating: 550 W

| Order No. | Type                         | Qty per unit |
|-----------|------------------------------|--------------|
| 03.9100   | For 12 butyrometers, 230 VAC | 1            |
| 03.9101   | For 12 butyrometers, 115 VAC | 1            |



## Accessories for Waterbath Butytherm Mini

| Order No. | Type  | Qty per unit |
|-----------|---|--------------|
| 03.9105   | Flat lid with 12 openings for butyrometers  | 1            |
| 03.1500   | Rack for 12 butyrometers (polypropylene), 2 x 6 positions (WxDxH) 220 x 80 x 150 mm, 2 handles (see on p. 15) | 1            |
| 03.1521   | Shaking cover for butyrometer rack with 12 tests, made of PVC (see on p.15)                                   | 1            |



03.1500+03.1521

## Waterbaths



### Waterbath WB 22 Pump

The waterbath provides optimal operating comfort with the splash-proof keypad and bright multi display (LED).

Modern microprocessor technology with PID temperature control ensures optimum temperature stability in the waterbath.

The circulation pump is used to improve the temperature distribution.

The adjustable overheating protection protects the samples.

Specifications:

- Material: Made of stainless steel
- Capacity: approx. 22 liters
- Int. dimensions (WxDxH): 49 x 29 x 15 cm
- Temperature range: +5 °C above ambient to 85 °C (± 0.2)
- Power: 1100 W
- Voltage: 230 VAC/50 Hz

| Order No.   | Type   | Qty per unit |
|-------------|--|--------------|
| 30GI.701030 | WB 22 Pump<br>for 4 racks 30GI.701096 or<br>for 2 racks 30GI.701097 or<br>for 2 racks 30GI.701096 and 1 rack 30GI.701097 | 1            |



30GI.701096

### Accessories for Waterbath WB 22 Pump

| Order No.   | Type   | Qty per unit |
|-------------|--|--------------|
| 30GI.701096 | Rack for 8 samples, made of stainless steel, 2 x 4 positions<br>(WxDxH) 140 x 65 x 140 mm, 2 handles   | 1            |
| 30GI.701097 | Rack for 20 samples, made of stainless steel, 2 x 10 positions<br>(WxDxH) 330 x 65 x 140 mm, 2 handles | 1            |
| 30GI.701098 | Bottom plate for racks   | 1            |

## Waterbath Eurotherm

Waterbath for tempering liquids with continuous microprocessor control for easy operation.  
Radiator made of stainless steel, incl. ground grid, 7-segment LED display.  
Display actual value, set point value via one keypress, input set point value in 0.1 °C increments.  
Shutdown in case of overheating, sensor damage or lack of water.  
Available with circulation pump (option on request) to improve the temperature distribution.



### Specifications:

- Material: Made of white PP, thickness 10 mm
- Temperature range: 10 °C above ambient to 95 °C (± 0.3)
- Power: 1100 W
- Voltage: 230 VAC/50 Hz

| Order No. | Type   | Qty per unit |
|-----------|--|--------------|
| 03.9201   | Model: W1/8, 8 liters, for 1 butyrometer rack 03.1500 (12 Buty)<br>int. dimensions (WxDxH): 23 x 18 x 20 cm    | 1            |
| 03.9202   | Model: W1/10, 10 liters, for 2 butyrometer racks 03.1500 (24 Buty)<br>int. dimensions (WxDxH): 23 x 23 x 20 cm | 1            |
| 03.9203   | Model: AET12, 12 liters, for 1 rack with 30 butyrometers<br>int. dimensions (WxDxH): 39 x 15 x 20 cm           | 1            |
| 03.9204   | Model: AET20, 20 liters, for 4 butyrometer racks 03.1500 (48 Buty)<br>int. dimensions (WxDxH): 39 x 25 x 20 cm | 1            |

## Accessories for Waterbath Eurotherm

| Order No. | Type  | Qty per unit |
|-----------|---|--------------|
| 03.9205   | Flat lid for waterbath model W1/8   | 1            |
| 03.9206   | Flat lid for waterbath model W1/10  | 1            |
| 03.9207   | Flat lid for waterbath model AET12  | 1            |
| 03.9208   | Flat lid for waterbath model AET20  | 1            |
| 03.9211   | Gabled lid for waterbath model W1/8   | 1            |
| 03.9212   | Gabled lid for waterbath model W1/10  | 1            |
| 03.9213   | Gabled lid for waterbath model AET12  | 1            |
| 03.9214   | Gabled lid for waterbath model AET20  | 1            |
| 03.9210   | Butyrometer shaker for 18 butyrometers with scale up,<br>suitable for waterbaths with int. dimensions (WxDxH):<br>39 x 25 x 20 cm and 39 x 15 x 20 cm | 1            |



03.9210

**Further options for these waterbaths available on request**

## Gerber Centrifuges



### Centrifuge Gerber Universal

Multipurpose centrifuge for the dairy laboratory.

3 pre-programmed speeds for:

- Gerber Butyrometers (350 x g)
- Solubility in milk powder (164 x g)
- Extraction tubes Roesse-Gottlieb/Mojonnier (80 x g)
- 1 variable speed range (200-1300 rpm), on request

Specifications:

- Timer 0 to 255 minutes
- Automatic brake
- Heating (option) with variable temperature setting up to 65 °C (1200 W)
- Microprocessor control with an LED display to show speed, run time, temperature and error messages
- Cover lock
- Steel casing (WxDxH): 64 x 64 x 45 cm

| Order No.  | Type   | Qty per unit |
|------------|--|--------------|
| 03.3110-12 | 230 VAC/50 Hz, without heating and with universal rotor for 12 positions, without inserts (order separately) | 1            |
| 03.3110-36 | 230 VAC/50 Hz, without heating and with special rotor incl. 36 sleeves (03.3340)                             | 1            |
| 03.3111-12 | 115 VAC/60 Hz, without heating and with universal rotor for 12 positions, without inserts (order separately) | 1            |
| 03.3111-36 | 115 VAC/60 Hz, without heating and with special rotor incl. 36 sleeves (03.3340)                             | 1            |
| 03.3112-12 | 230 VAC/50 Hz, with heating and universal rotor for 12 positions, without inserts (order separately)         | 1            |
| 03.3112-36 | 230 VAC/50 Hz, with heating and special rotor incl. 36 sleeves (03.3340)                                     | 1            |
| 03.3113-12 | 115 VAC/60 Hz, with heating and universal rotor for 12 positions, without inserts (order separately)         | 1            |
| 03.3113-36 | 115 VAC/60 Hz, with heating and special rotor incl. 36 sleeves (03.3340)                                     | 1            |

## Accessories for Centrifuge Gerber Universal

### Universal Rotor for Centrifuge Gerber Universal

| Order No. | Type  | Qty per unit |
|-----------|---|--------------|
| 03.3300   | 12 places, without inserts (order separately) | 1            |



### Inserts for Universal Rotor (order separately)

| Order No. | Type  | Qty per unit |
|-----------|---|--------------|
| 03.1630   | Butyrometer insert Gerber sleeve with ring, made of stainless steel, Ø int. 26 mm, for butyrometers, solubility tubes and Roesse-Gottlieb tubes | 1            |
| 03.1631   | Insert for ADPI solubility tubes made of stainless steel, Ø int. 31 mm, for solubility tubes according to ADPI                                  | 1            |
| 03.1632   | Mojonnier insert insert with holder made of aluminum, for Mojonnier tubes   | 1            |
| 03.1633   | Babcock insert (on request) made of stainless steel, Ø int. 38 mm, for babcock bottles  | 1            |



### Special Rotor for Centrifuge Gerber Universal

| Order No. | Type   | Qty per unit |
|-----------|--|--------------|
| 03.3340   | Complete with 36 swing out places, made of stainless steel, for Gerber butyrometers and solubility tubes according to Gerber | 1            |
| 03.3341   | Sleeve for special rotor, made of stainless steel, Ø int. 26 mm  | 1            |



## Gerber Centrifuges



### Centrifuge Gerber Micro II

Small centrifuge for the determination of fat in milk and dairy products and solubility of milk powder according to Gerber.

Specifications:

- Timer
- Automatic brake
- Heating with variable temperature setting (600 W)
- Microprocessor control with digital reading
- Cover lock
- Steel casing (WxDxH): 43 x 46 x 28 cm
- Incl. rotor (of aluminum) and bushing (of brass)

| Order No. | Type  | Qty per unit |
|-----------|---|--------------|
| 03.2250   | For 8 butyrometers, 230 VAC/50 Hz                 | 1            |
| 03.2251   | For 8 butyrometers, 115 VAC/60 Hz                 | 1            |
| 03.2260   | For 12 butyrometers, 230 VAC/50 Hz                | 1            |
| 03.2261   | For 12 butyrometers, 115 VAC/60 Hz                | 1            |
| 03.2270   | For 8 babcock bottles, 230 VAC/50 Hz              | 1            |
| 03.2271   | For 8 babcock bottles, 115 VAC/60 Hz (on request) | 1            |

### Consumables for Centrifuge Gerber Micro II

| Order No.   | Type                             | Qty per unit |
|-------------|----------------------------------|--------------|
| 03.16269-8  | Bushing of brass, Ø int. 25.5 mm | 8            |
| 03.16269-12 | Bushing of brass, Ø int. 25.5 mm | 12           |

## Extraction methods to determine the fat content

### Mojonnier Analyzer Moplant

Complete apparatus to determine fat and total solids in milk and dairy products according to the Mojonnier process. The milktester Moplant makes it easy to perform the weight analytical extraction method according to Roese-Gottlieb and Schmid-Bondzynski. All necessary activities like dissolving, extracting, centrifugation, poring off, evaporating, drying, cooling and weighing can be performed in one place.

Specifications:

- Material: Made of stainless steel
- Voltage: 400 VAC/50 Hz
- Ex-safe



04.3221

| Order No. | Type  | Qty per unit |
|-----------|---|--------------|
| 04.3221   | Mojonnier apparatus single<br>1 vacuum chamber, 1 cooling chamber<br>ext. dimensions (WxDxH): 1939 x 1053 x 1426 mm, weight: 250 kg   | 1            |
| 04.3231   | Mojonnier apparatus double<br>2 vacuum chambers, 2 cooling chambers<br>ext. dimensions (WxDxH): 2384 x 1053 x 1426 mm, weight: 350 kg | 1            |

### More Equipment for Fat Extraction

#### Centrifuge Gerber Universal

Multipurpose centrifuge for the dairy laboratory (see on p. 22).

| Order No.  | Type   | Qty per unit |
|------------|--|--------------|
| 03.3110-12 | 230 VAC, without heating and with universal rotor for 12 positions, without inserts (order separately) | 1            |
| 03.3111-12 | 115 VAC, without heating and with universal rotor for 12 positions, without inserts (order separately) | 1            |



#### Inserts (for the universal rotor - order separately)

| Order No. | Type  | Qty per unit |
|-----------|---|--------------|
| 03.1630   | Butyrometer insert Gerber for Roese-Gottlieb tubes (see on p. 23) | 1            |
| 03.1632   | Mojonnier insert for Mojonnier tubes (see on p. 23)               | 1            |
| 03.163201 | Spare suction cup for Mojonnier insert                            | 1            |



03.1632

#### Shaking Machine Rototube

Rototube makes it easy to mix samples. It is powered by compressed air (compressed air supply in the laboratory is required).

| Order No. | Type                   | Qty per unit |
|-----------|------------------------|--------------|
| 04.3100   | For 8 Mojonnier flasks | 1            |



## Extraction methods to determine the fat content



04.3000

### Extraction Flasks acc. to Mojonnier

Made of borosilicate glass.

| Order No. | Type   | Qty per unit |
|-----------|--|--------------|
| 04.3000   | Standard: DIN, round bulb, with a cork stopper (04.30000-1)          | 1            |
| 04.3001   | Standard: DIN, round bulb, with a glass stopper NS 19                | 1            |
| 04.3002   | Standard: ISO, A-shape, flat bulb, with a cork stopper (04.30001-1)  | 1            |
| 04.3003   | Standard: ISO, C-shape, round bulb, with a cork stopper (04.30001-1) | 1            |
| 04.30020  | Standard: US G3, flat bulb, max. weight: 60 g, without a stopper     | 1            |



### Cork Stoppers for Extraction Flasks

| Order No.  | Type                                    | Qty per unit |
|------------|---|--------------|
| 04.30000-1 | Ø 14/17 x 27 mm for 04.3000             | 1            |
| 04.30001-1 | Ø 15/18 x 27 mm for 04.3002 and 04.3003 | 1            |
| 04.30000   | Ø 14/17 x 27 mm for 04.3000             | 100          |
| 04.30001   | Ø 15/18 x 27 mm for 04.3002 and 04.3003 | 100          |



### Rack for Mojonnier Flasks

| Order No. | Type                              | Qty per unit |
|-----------|-----------------------------------|--------------|
| 04.3004   | For 8 Mojonnier tubes, made of PP | 1            |



### Extraction Flasks acc. to Roese-Gottlieb

Made of borosilicate glass.

| Order No. | Type                 | Qty per unit |
|-----------|----------------------|--------------|
| 04.3005   | With a cork stopper  | 1            |
| 04.3006   | With a glass stopper | 1            |

### Siphon Fitting to Roese-Gottlieb Flasks

| Order No. | Type   | Qty per unit |
|-----------|--|--------------|
| 04.3007   | With arrival and suction tube and a matching cork stopper (04.30070) | 1            |

**Equipments for the Soxhlet method would be available in our online shop**

## Extraction methods to determine the fat content

### General Accessories for Fat Extraction

#### Weighing Pipets

| Order No. | Type       | Qty per unit |
|-----------|------------|--------------|
| 04.3020   | 1 ml, bent | 1            |
| 04.3021   | 2 ml, bent | 1            |
| 04.3022   | 5 ml, bent | 1            |



04.3022

#### Rack for 4 Weighing Pipets

| Order No. | Type              | Qty per unit |
|-----------|-------------------|--------------|
| 04.3025   | For 4 bent pipets | 1            |



#### Aluminum Dishes

Ø 85 x 50 mm, without a lid, numbered.

| Order No. | Type               | Qty per unit |
|-----------|--------------------|--------------|
| 04.3030   | Set with 8 dishes  | 8            |
| 04.3031   | Set with 16 dishes | 16           |

## Dry matter and moisture determination



05.0010

### Evaporating Dishes

| Order No. | Type   | Qty per unit |
|-----------|--|--------------|
| 05.0000   | Ø 60 x 60 mm, made of aluminum, without a lid, approx. 50 g          | 1            |
| 05.0005   | Ø 60 x 30 mm, made of anodized aluminum, without a lid, approx. 30 g | 1            |
| 05.0006   | Ø 75 x 25 mm, made of nickel, with a knob lid                        | 1            |
| 05.0007   | Ø 90 x 16 mm, made of nickel, with a knob lid                        | 1            |
| 05.0009   | Ø 102 x 44 mm, made of INOX 18/10, with a knob lid                   | 1            |
| 05.0010   | Ø 80 x 43 mm, made of INOX 18/10, with a knob lid                    | 1            |
| 05.0011   | Ø 65 x 40 mm, made of INOX 18/10, with a knob lid                    | 1            |
| 05.0021   | Numbering per dish according to customer specifications              | 1            |



### Evaporating Dish Liebfeld

To determine the water content in cheese.

| Order No. | Type  | Qty per unit |
|-----------|---|--------------|
| 05.0020   | Ø 60 x 30 mm, made of anodized aluminum, cap with bayonet type cover lock | 1            |
| 05.0021   | Numbering per dish according to customer specifications                   | 1            |



### Pestle for Evaporating Dish Liebfeld

| Order No. | Type                                   | Qty per unit |
|-----------|--|--------------|
| 05.0022   | Made of glass, Ø 8/16 mm, length 60 mm | 1            |



### Crucible Tongs

Made of 18/10 steel, double bent, with gripping tips.

| Order No. | Type          | Qty per unit |
|-----------|---------------|--------------|
| 9.310122  | Length 220 mm | 1            |
| 9.310125  | Length 250 mm | 1            |
| 9.310130  | Length 300 mm | 1            |



### Total Solids Calculator Ackermann

To calculate total solids in milk, based on fat content and specific gravity. 2 discs with readings of lactometer degrees (at 15°C) and Gerber fat from 0.7 to 6 %. Outside disc contains total solids reading.

| Order No. | Type                              | Qty per unit |
|-----------|-----------------------------------|--------------|
| 05.0050   | Total solids calculator Ackermann | 1            |

## Dry matter and moisture determination

### Quartz Sand/Sea Sand

Washed and annealed, grain size 0.1 to 0.3 mm.

| Order No. | Type  | Qty per unit |
|-----------|-------|--------------|
| 05.0030   | 1 kg  | 1            |
| 05.0032   | 5 kg  | 1            |
| 05.0031   | 25 kg | 1            |

### Vacuum Desiccators

DURAN clear glass, with NOVUS tubus RN 24/29 and stopcock assembly in lid, vacuum tight.

| Order No. | Type                      | Qty per unit |
|-----------|---------------------------|--------------|
| 9.042119  | Ø int. 100, height 174 mm | 1            |
| 9.042131  | Ø int. 150, height 239 mm | 1            |
| 9.042138  | Ø int. 200, height 296 mm | 1            |
| 9.042143  | Ø int. 250, height 344 mm | 1            |
| 9.042147  | Ø int. 300, height 420 mm | 1            |



### Desiccator Plates

Made of porcelain, without feet, with a hole Ø 20 mm in the center and with outer holes Ø 5 mm.

| Order No. | Type     | Qty per unit |
|-----------|----------|--------------|
| 9.042509  | Ø 90 mm  | 1            |
| 9.042514  | Ø 140 mm | 1            |
| 9.042519  | Ø 190 mm | 1            |
| 9.042523  | Ø 235 mm | 1            |
| 9.042528  | Ø 280 mm | 1            |



### Desiccant Beads

Orange as the indicator color. Grain size 1 to 3 mm or 2 to 5 mm. This is self-indicating drying agent (white silica gel) is free from any heavy metals and would be environmentally friendly.

| Order No. | Type                              | Qty per unit |
|-----------|-----------------------------------|--------------|
| 6.267160  | 1 kg box, grain size 1 to 3.15 mm | 1            |
| 6.267161  | 3 kg box, grain size 1 to 3.15 mm | 1            |
| 9.042543  | 1 kg box, grain size 2 to 5 mm    | 1            |
| 9.042544  | 3 kg box, grain size 2 to 5 mm    | 1            |



## Dry matter and moisture determination



30GI.601010

### Ovens Type TSN

Specifications:

- With natural convection
- Temperature range: + 5 °C above ambient to 300 °C
- With digital temperature controller
- Safety class 3.1
- Stainless steel shelves
- Calibration certificate (150°C)
- 230 VAC

| Order No.   | Type  | Qty per unit |
|-------------|---|--------------|
| 30GI.601010 | TSN 50, volume: 50 l, power: 1000 W<br>int. dimensions (WxDxH): 400 x 330 x 420 mm<br>ext. dimensions (WxDxH): 665 x 470 x 635 mm   | 1            |
| 30GI.601020 | TSN 115, volume: 115 l, power: 1900 W<br>int. dimensions (WxDxH): 520 x 450 x 495 mm<br>ext. dimensions (WxDxH): 790 x 600 x 750 mm | 1            |



30GI.602020

### Ovens Type TSF

Specifications:

- With forced convection
- Temperature range: + 10 °C above ambient to 300 °C
- With digital temperature controller
- Safety class 3.1
- Stainless steel shelves
- Calibration certificate (150°C)
- 230 VAC

| Order No.   | Type  | Qty per unit |
|-------------|---|--------------|
| 30GI.602010 | TSF 50, volume: 50 l, power: 980 W<br>int. dimensions (WxDxH): 400 x 310 x 415 mm<br>ext. dimensions (WxDxH): 665 x 570 x 635 mm    | 1            |
| 30GI.602020 | TSF 120, volume: 120 l, power: 1900 W<br>int. dimensions (WxDxH): 520 x 435 x 530 mm<br>ext. dimensions (WxDxH): 785 x 690 x 750 mm | 1            |

More ovens can be obtained at: [www.gerber-instruments.com](http://www.gerber-instruments.com)

## Dry matter and moisture determination

### Moisture Analyzer BM 65

The newly developed moisture analyzer BM 65 is characterized by numerous features, helping the user make working and testing with the instrument easy and convenient.

The large, backlit display makes it very easy to read under any conditions of light.

Various parameters can be displayed simultaneously.

**Specifications:**

- Max. capacity: 65 g
- Readability: 0.001 g/ 0.01 %
- Reproducibility: 0.002 g/ 0.05 %
- Weighing units: Gram, % moisture, % solids, % moisture on dry base (ATRO %M) solids on dry base, (ATO %S)
- Stabilisation time: 4 seconds
- Internal memory: up to 99 test results or 49 programmable user settings
- Calibration: Automatic external
- Heating source: 440 W halogen heater 50 to 160 °C
- Drying programs: Standard one step or up to 3 temp setting ramps
- Display: Large, backlit LCD display with 24 mm size digits
- RS232 interface
- Bilingual menu (G/E)



| Order No.  | Type                    | Qty per unit |
|------------|-------------------------|--------------|
| 30PI.BM-65 | Moisture analyzer BM 65 | 1            |

### Accessories for Moisture Analyzer BM 65

| Order No.  | Type  | Qty per unit |
|------------|---|--------------|
| 6.236854   | Weighing dishes, aluminum, Ø 101 x 8 mm   | 50           |
| 30PI.AAC70 | Weighing dishes, aluminum, Ø 100 x 8 mm, with knurled edge                                | 250          |
| 74.6906940 | Glass fibre filters<br>Ø 90 mm, to use with liquid, pasty and fatty samples, hard quality | 80           |



## Dry matter and moisture determination



### Analytical Balances

Simple recipe/documenting with a combined tare/print function, mixing ingredients for the recipe are numbered automatically.

Single-Cell Technology:

- Fully automatic manufactured weighing cell from one piece
- Stable temperature behavior
- Short stable time, steady weight values within approx 3 sec under laboratory conditions

Specifications:

- Housing (WxDxH): 210 x 340 x 325 mm
- Weighing chamber (WxDxH): 174 x 162 x 227 mm
- Ambient temperature: 10 °C/30 °C
- Net weight: 6 kg

| Order No. | Type  | Qty per unit |
|-----------|---|--------------|
| 9.901452  | ABS 120-4N, capacity 120 g, readability 0.1 mg, Ø-plate 91 mm | 1            |
| 9.901453  | ABS 220-4N, capacity 220 g, readability 0.1 mg, Ø-plate 91 mm | 1            |

### Accessories for Analytical Balances



### Sample Dishes/Weighing Dishes

One-time use sample dishes, made of aluminum.

| Order No. | Type                  | Qty per unit |
|-----------|-----------------------|--------------|
| 6.205225  | Ø 100 mm, height 7 mm | 80           |
| 42.0290   | Ø 100 mm, height 7 mm | 80           |



### Spoon Spatulas

Made of steel 18/10, deep form.

| Order No. | Type          | Qty per unit |
|-----------|---------------|--------------|
| 9.150315  | Length 150 mm | 1            |
| 9.150318  | Length 180 mm | 1            |



### Tweezers

Made of steel 18/10.

| Order No. | Type          | Qty per unit |
|-----------|---------------|--------------|
| 9.171311  | Length 115 mm | 1            |
| 9.171313  | Length 130 mm | 1            |

### Thermolactodensimeter Gerber large Model with Thermometer

- Measuring range: 1025-1036 kg/m<sup>3</sup>
- Special alloy ballast
- Division: 0.5 kg/m<sup>3</sup>
- Dimensions: approx. Ø 30 x 360 mm
- Thermometer: 10 to 30 °C above density scale
- Reading above stem

| Order No. | Type  | Qty per unit |
|-----------|---|--------------|
| 05.1000   | T = 20 °C   | 1            |
| 05.1001   | T = 20 °C, officially calibrated, without certificate | 1            |
| 05.1002   | T = 15 °C   | 1            |
| 05.1003   | T = 20 °C, officially calibrated, with certificate    | 1            |



05.1000

### Lactodensimeter Gerber without Thermometer with Density Scale

- Measuring range: 1020-1040 kg/m<sup>3</sup>
- Special alloy ballast
- Division: 0.5 kg/m<sup>3</sup>
- Dimensions: approx. Ø 29 x 240 mm
- With negative scale
- With density scale on black background
- Reading above stem

| Order No. | Type                                | Qty per unit |
|-----------|-------------------------------------|--------------|
| 05.1007   | T = 15 °C (replacement for 05.1006) | 1            |
| 05.1008   | T = 20 °C (replacement for 05.1005) | 1            |



05.1008

### Thermometer for Lactodensimeter Gerber with Density Scale

To correct temperatures of 05.1007 and 05.1008.

| Order No. | Type   | Qty per unit |
|-----------|--|--------------|
| 6.250170  | Measure range: -10 to +50 °C:0.5 °C, solid stem, red filling, Ø 6 mm, length approx. 300 mm, immersion depth 76 mm | 1            |

## Specific weight



05.1010

### Thermolactodensimeter Gerber small Model with Thermometer

- Special alloy ballast
- Division: 0.5 kg/m<sup>3</sup>
- Dimensions: approx. Ø 22 x 230 mm
- Thermometer: 0 to 40 °C in body
- Reading above stem

| Order No. | Type      | Measuring range             | Qty per unit |
|-----------|-----------|-----------------------------|--------------|
| 05.1010   | T = 20 °C | 1025-1036 kg/m <sup>3</sup> | 1            |
| 05.1011   | T = 15 °C | 1025-1036 kg/m <sup>3</sup> | 1            |
| 05.1012   | T = 20 °C | 1020-1040 kg/m <sup>3</sup> | 1            |
| 05.1013   | T = 15 °C | 1020-1040 kg/m <sup>3</sup> | 1            |



05.1517

### Lactodensimeter Gerber without Thermometer

- Measuring range: 1025-1036 kg/m<sup>3</sup>
- Special alloy ballast
- Division: 0.5 kg/m<sup>3</sup>
- Dimensions: approx. Ø 30 x 300 mm
- Reading above stem

| Order No. | Type      | Qty per unit |
|-----------|-----------|--------------|
| 05.1517   | T = 20 °C | 1            |
| 05.1518   | T = 15 °C | 1            |



05.1020

### Thermolactodensimeter Quevenne with Thermometer

- Measuring range: 1015-1040 Quevenne
- Special alloy ballast
- Division: 1 Quevenne
- Dimensions: approx. Ø 23 x 270 mm
- Color scale
- Thermometer: 0 to 40 °C above density scale
- Reading above stem

| Order No. | Type                           | Qty per unit |
|-----------|--------------------------------|--------------|
| 05.1020   | T = 20 °C                      | 1            |
| 05.1021   | T = 15 °C                      | 1            |
| 05.1022   | T = 20 °C, red alcohol filling | 1            |



05.1026

### Lactodensimeter Quevenne without Thermometer

- Measuring range: 1015-1040 Quevenne
- Special alloy ballast
- Division: 1 Quevenne
- Dimensions: approx. Ø 22 x 220 mm
- Color scale
- Reading above stem

| Order No. | Type      | Qty per unit |
|-----------|-----------|--------------|
| 05.1025   | T = 20 °C | 1            |
| 05.1026   | T = 15 °C | 1            |

### Hydrometer for Condensed Milk without Thermometer

- Special alloy ballast
- T = 20 °C

| Order No. | Measuring range             | Division              | Dimensions            | Qty per unit |
|-----------|-----------------------------|-----------------------|-----------------------|--------------|
| 05.1030   | 1040-1080 kg/m <sup>3</sup> | 1.0 kg/m <sup>3</sup> | approx. Ø 22 x 280 mm | 1            |
| 05.1031   | 1000-1240 kg/m <sup>3</sup> | 2.0 kg/m <sup>3</sup> | approx. Ø 22 x 310 mm | 1            |



05.1030

### Hydrometer for Yogurt and Cocoa with Thermometer

- Measuring range: 1030-1060 kg/m<sup>3</sup>
- Special alloy ballast
- Division: 1.0 kg/m<sup>3</sup>
- Dimensions: approx. Ø 22 x 230 mm
- Thermometer: 0 to 40 °C

| Order No. | Type      | Qty per unit |
|-----------|-----------|--------------|
| 05.1032   | T = 20 °C | 1            |



### Hydrometer for Buttermilk Serum without Thermometer

- Measuring range: 1014-1030 kg/m<sup>3</sup>
- Special alloy ballast
- Division: 2.0 kg/m<sup>3</sup>
- Dimensions: approx. Ø 22 x 240 mm
- Reading above stem

| Order No. | Type      | Qty per unit |
|-----------|-----------|--------------|
| 05.1033   | T = 20 °C | 1            |

### Hydrometer for Whey with Thermometer

- Measuring range: 1005-1025 kg/m<sup>3</sup>
- Special alloy ballast
- Division: 2.0 kg/m<sup>3</sup>
- Dimensions: approx. Ø 18 x 230 mm
- Thermometer: 0 to 40 °C

| Order No. | Type      | Qty per unit |
|-----------|-----------|--------------|
| 05.1034   | T = 20 °C | 1            |

## Specific weight



05.1035

### Special Hydrometer without Thermometer

- Special alloy ballast
- T = 20 °C
- Division: 1.0 kg/m<sup>3</sup>

| Order No. | Type | Measuring range             | Dimensions            | Qty per unit |
|-----------|------|-----------------------------|-----------------------|--------------|
| 05.1035   | A    | 1050-1300 kg/m <sup>3</sup> | approx. Ø 20 x 400 mm | 1            |
| 05.1037   | B    | 1044-1057 kg/m <sup>3</sup> | approx. Ø 28 x 320 mm | 1            |
| 05.1039   | C    | 1029-1042 kg/m <sup>3</sup> | approx. Ø 28 x 345 mm | 1            |
| 05.1041   | D    | 1040-1100 kg/m <sup>3</sup> | approx. Ø 20 x 335 mm | 1            |
| 05.1043   | E    | 1023-1038 kg/m <sup>3</sup> | approx. Ø 24 x 305 mm | 1            |
| 05.1045   | F    | 1010-1030 kg/m <sup>3</sup> | approx. Ø 17 x 330 mm | 1            |
| 05.1049   | H    | 1030-1140 kg/m <sup>3</sup> | approx. Ø 17 x 330 mm | 1            |

### Special Hydrometer with Thermometer

- Special alloy ballast
- T = 20 °C
- Division: 1.0 kg/m<sup>3</sup>
- Thermometer: 0 to 40 °C

| Order No. | Type | Measuring range             | Dimensions            | Qty per unit |
|-----------|------|-----------------------------|-----------------------|--------------|
| 05.1038   | B    | 1044-1057 kg/m <sup>3</sup> | approx. Ø 28 x 320 mm | 1            |
| 05.1040   | D    | 1040-1100 kg/m <sup>3</sup> | approx. Ø 20 x 335 mm | 1            |
| 05.1042   | E    | 1023-1038 kg/m <sup>3</sup> | approx. Ø 24 x 305 mm | 1            |
| 05.1048   | G    | 1023-1038 kg/m <sup>3</sup> | approx. Ø 17 x 220 mm | 1            |



05.1160

### Hydrometer for Sulfuric Acid without Thermometer

To monitor and adjust the fat determination conducted by Gerber

- Special alloy ballast
- T = 20 °C
- Division: 0.1 kg/m<sup>3</sup>

| Order No. | Measuring range             | Dimensions            | Qty per unit |
|-----------|-----------------------------|-----------------------|--------------|
| 05.1160   | 1800-1850 kg/m <sup>3</sup> | approx. Ø 24 x 270 mm | 1            |
| 05.1161   | 1500-1550 kg/m <sup>3</sup> | approx. Ø 20 x 270 mm | 1            |



### Hydrometer for Amyl Alcohol without Thermometer

To monitor and adjust the fat determination conducted by Gerber

- Special alloy ballast
- T = 20 °C
- Division: 0.1 kg/m<sup>3</sup>
- Dimensions: approx. Ø 25 x 260 mm

| Order No. | Measuring range           | Qty per unit |
|-----------|---------------------------|--------------|
| 05.1165   | 800-840 kg/m <sup>3</sup> | 1            |

### Hydrometer for Brine acc. to Baumé without Thermometer

- Special alloy ballast
- T = 15 °C
- Division: 0.1 Bé

| Order No. | Measuring range | Length         | Qty per unit |
|-----------|-----------------|----------------|--------------|
| 9.004301  | 0-1 Bé          | approx. 260 mm | 1            |
| 9.004302  | 0-2 Bé          | approx. 260 mm | 1            |
| 05.1151   | 0-30 Bé         | approx. 250 mm | 1            |
| 05.1153   | 0-50 Bé         | approx. 250 mm | 1            |



05.1151

### Hydrometer for Brine acc. to Bischoff without Thermometer

| Order No. | Measuring range | Length         | Qty per unit |
|-----------|-----------------|----------------|--------------|
| 6.079097  | 0-27 g/l        | approx. 270 mm | 1            |

### Alcohol Hydrometer

- Special alloy ballast
- T = 20 °C
- Division: 1.0 Vol.- %/1.0 °Oe

| Order No. | Measuring range                           | Dimensions            | Qty per unit |
|-----------|---|-----------------------|--------------|
| 05.1170   | 35-75 Vol.-%, with thermometer 0 to 35 °C | approx. Ø 15 x 320 mm | 1            |
| 05.1171   | 0-100 Vol.-%, with thermometer 0 to 35 °C | approx. Ø 15 x 330 mm | 1            |
| 05.1172   | 0-130 °Oe, with thermometer 0 to 35 °C    | approx. Ø 16 x 320 mm | 1            |
| 05.1173   | 0-100 Vol.-%, without thermometer         | approx. Ø 17 x 260 mm | 1            |



05.1171

### Alcohol Hydrometer without Thermometer

- Special alloy ballast
- T = 20 °C
- Division: 0.2 Vol.- %
- Length: approx. 340 mm

| Order No. | Measuring range | Qty per unit |
|-----------|-----------------|--------------|
| 05.11650  | 0-20 Vol.-%     | 1            |
| 05.1166   | 20-40 Vol.-%    | 1            |
| 05.1167   | 40-60 Vol.-%    | 1            |
| 05.1168   | 60-80 Vol.-%    | 1            |
| 05.1169   | 80-100 Vol.-%   | 1            |

## Specific weight

### Alcohol Hydrometer Class II without Thermometer

- T = 20 °C
- Division: 0.1 Vol.-%
- Length: approx. 380 mm

| Order No. | Measuring range | Qty per unit |
|-----------|-----------------|--------------|
| 6.200767  | 0 - 10 Vol.-%   | 1            |
| 6.231928  | 10 - 20 Vol.-%  | 1            |
| 6.250252  | 20 - 30 Vol.-%  | 1            |
| 6.227043  | 30 - 40 Vol.-%  | 1            |
| 6.250253  | 40 - 50 Vol.-%  | 1            |
| 6.227045  | 50 - 60 Vol.-%  | 1            |
| 6.250254  | 60 - 70 Vol.-%  | 1            |
| 6.227046  | 70 - 80 Vol.-%  | 1            |
| 6.228414  | 80 - 90 Vol.-%  | 1            |
| 6.227047  | 90 - 100 Vol.-% | 1            |

### Precision Hydrometer without Thermometer

- Special alloy ballast
- T = 20 °C
- Division: 1.0 kg/m<sup>3</sup>
- Length: approx. 300 mm

| Order No. | Measuring range             | Qty per unit |
|-----------|-----------------------------|--------------|
| 05.1176   | 600-700 kg/m <sup>3</sup>   | 1            |
| 05.1177   | 700-800 kg/m <sup>3</sup>   | 1            |
| 05.1178   | 800-900 kg/m <sup>3</sup>   | 1            |
| 05.1179   | 900-1000 kg/m <sup>3</sup>  | 1            |
| 05.1191   | 1000-1100 kg/m <sup>3</sup> | 1            |
| 05.1192   | 1100-1200 kg/m <sup>3</sup> | 1            |
| 05.1193   | 1200-1300 kg/m <sup>3</sup> | 1            |
| 05.1194   | 1300-1400 kg/m <sup>3</sup> | 1            |
| 05.1184   | 1400-1500 kg/m <sup>3</sup> | 1            |
| 05.1185   | 1500-1600 kg/m <sup>3</sup> | 1            |
| 05.1186   | 1600-1700 kg/m <sup>3</sup> | 1            |
| 05.1187   | 1700-1800 kg/m <sup>3</sup> | 1            |
| 05.1188   | 1800-1900 kg/m <sup>3</sup> | 1            |
| 05.1189   | 1900-2000 kg/m <sup>3</sup> | 1            |



05.1193

## Remarks to Lactodensimeters and Hydrometers

The official international unit of density is: kg/m<sup>3</sup>.

We have adapted the unit of measurement ranges of our lactodensimeters/hydrometers to the international standard.

During the changeover to the new unit, it would be possible that you still get instruments with older, but still valid units e.g. g/ml or g/cm<sup>3</sup>.

## General Accessories for Hydrometers

### Test Certificate for Hydrometers

| Order No. | Type  | Qty per unit |
|-----------|---|--------------|
| 05.1004   | Test certificate Gerber Instruments for hydrometers | 1            |

### Hydrometer Jars

Made of PP, with an overflow chamber and a spout.

| Order No. | Type                                    | Qty per unit |
|-----------|---|--------------|
| 9.004900  | Capacity 500 ml, Ø 50 mm, height 350 mm | 1            |

### Multi Purpose Cylinders for Hydrometers

Made of DURAN glass, with a base, rim roughly ground, can be autoclaved.

| Order No. | Type                                    | Qty per unit |
|-----------|---|--------------|
| 9.318052  | Capacity 380 ml, Ø 40 mm, height 300 mm | 1            |
| 9.318068  | Capacity 500 ml, Ø 40 mm, height 400 mm | 1            |
| 9.318053  | Capacity 600 ml, Ø 50 mm, height 300 mm | 1            |



Fig. similar

### Suspended Glass Cylinder (Cardanic Suspension)

For all lactometers and hydrometers. Offers better reading of the hydrometers at the height of the eyes and fast sample change.

| Order No. | Type   | Qty per unit |
|-----------|--|--------------|
| 05.1205   | Suspended glass cylinder with gimbal/cardanic suspension<br>Included in the delivery:<br>05.12050 Cardanic suspension<br>05.12051 Glass cylinder. with an overflow and drain cock<br>05.12052 Base plate | 1            |
| 05.12051  | Spare glass cylinder with an overflow and drain cock<br>Ø 41 mm, length 360 mm   | 1            |
| 05.12053  | Spare glass cylinder without an overflow and drain cock,<br>Ø 44 mm, length 450 mm   | 1            |



## Detection of added water in milk



### Lactic Meter

For fast refractive determination of total solids and added water in milk. The lactic meter offers a fast, coarse result of solids and non-fat in milk samples, without laboratory analysis. Once a drop of milk is placed on the prism and the result can be immediately read. Samples with probability of addition of water can be securely isolated and brought to the laboratory for a more accurate analysis.

| Order No. | Type                | Qty per unit |
|-----------|---------------------|--------------|
| 05.2000   | Lactic meter 0-20 % | 1            |

## Cryoscope Gerber Standard

Freezing point determination with double walled, isolated cooling container, without an electric stirrer.

Included in the delivery:

- 05.2108 Cooling container
- 05.2202 Sample tube
- 05.21011 Stirrer small (for sample tube)
- 05.21012 Stirrer large (for cooling container)
- 05.2203 Cryoscope thermometer (for milk sample)
- 10.1000 Cooling thermometer (for cooling container)
- 05.2201 Calculator for added water
- 05.21001 Stopper PVC
- 05.21006 Stopper with hole



| Order No. | Type                               | Qty per unit |
|-----------|------------------------------------|--------------|
| 05.2100   | Cryoscope Gerber Standard complete | 1            |

## Consumables for Cryoscope Gerber Standard

| Order No. | Type  | Qty per unit |
|-----------|---|--------------|
| 05.2201   | Calculator for added water to convert the freezing point in % of added water with the compensation of the temperature correction of the cryoscope thermometer | 1            |
| 05.2202   | Sample tube, RN 34, Ø 30 x 188 mm   | 1            |
| 05.2203   | Cryoscope thermometer for the milk sample, measuring range: -1.2 to + 0.4 °C, scaling: 0.01 °C, with test certificate   | 1            |
| 10.1000   | Cooling thermometer for the cooling container, measuring range: -30 to + 50 °C scaling: 0.1 °C, length approx. 270 mm   | 1            |

## Cryoscopes



05.25501

### Cryoscope C1

To reliably and rapidly determine the freezing point in milk acc. to ISO 5764/IDF 108. During the daily inspection of water content in raw milk, the device would be working extremely quietly. The dynamic cooling system, allows a maximum sample throughput even at ambient temperatures up to 35 °C.

**Specifications:**

- Robust and compact design
- Easy to calibrate
- Adjustable amplitude of the stirrer
- Time or plateau mode selectable
- Indication in m°C or m°H
- Touchscreen
- Data output to an external printer and/or PC selectable
- Worldwide support over the Internet possible
- Sample volume: 2.0 ml or 2.5 ml
- Measuring range: 0 to -1000 m°C/m°H
- Resolution: 0.1 m°C/m°H
- Voltage: 110 - 240 VAC/50 - 60Hz

**Included in the delivery:**

- 05.5024 Standard solution 408, 250 ml
- 05.5025 Standard solution 512, 250 ml
- 05.5026 Standard solution 600, 250 ml
- 05.5027 Heat transfer fluid, 250 ml
- 05.5028 Coolant C1, 250 ml
- 05.5020 Test tubes 2.0 ml, with ring marks
- 05.25186 User manual
- 05.25184 Instrument setup
- 05.25086 Country-specific power cord

| Order No. | Type                       | Qty per unit |
|-----------|----------------------------|--------------|
| 05.25500  | C1 Manual for 1 sample     | 1            |
| 05.25501  | C1A Automat for 12 samples | 1            |



05.25502



05.5030

### Accessories for Cryoscope C1 and C1A

| Order No. | Type  | Qty per unit |
|-----------|---|--------------|
| 05.25504  | Set: printer incl. USB RS232 adapter, print paper           | 1            |
| 05.25502  | Printer with power supply and USB cable                     | 1            |
| 05.25503  | USB RS232 adapter   | 1            |
| 6.235043  | Pipette 2.0 ml fix volume                                   | 1            |
| 6.258006  | Pipette 2.5 ml fix volume                                   | 1            |
| 05.5030   | Test tube rack for 30 sample tubes, made of stainless steel | 1            |
| 05.25095  | USB Ethernet adapter  | 1            |

### Consumables for Cryoscope C1 and C1A

| Order No. | Type   | Qty per unit |
|-----------|--|--------------|
| 05.5024   | Standard solution 408, 250 ml                | 1            |
| 05.5025   | Standard solution 512, 250 ml                | 1            |
| 05.5026   | Standard solution 600, 250 ml                | 1            |
| 05.5027   | Heat transfer fluid, 250 ml                  | 1            |
| 05.5028   | Coolant C1, 250 ml                           | 1            |
| 05.5020   | Test tubes with a ring mark at 2.0 ml        | 10           |
| 05.5021   | Test tubes with a ring mark at 2.5 ml        | 10           |
| 05.5022   | Test tubes with ring marks at 2.0 and 2.5 ml | 10           |
| 9.411501  | Pipette tips, 2 ml                           | 500          |
| 9.411449  | Pipette tips, 5 ml                           | 500          |
| 05.25505  | Print paper                                  | 10           |



05.5024-05.5026



05.5020

## Special examinations in butter

### Fat-Free Dry Matter (Butyra Test)

The Butyra test is used to rapidly determine the fat-free dry mass in unsalted butter during the manufacturing process.

The sample is weighed in the sample vial, evaporated at about 180 °C and then centrifuged.

In less than 10 minutes fat-free dry matter content can be read directly on the graduated sample container.

| Order No. | Type  | Qty per unit |
|-----------|---|--------------|
| 05.6100   | Butyra test sample tube, made of glass, with graduation | 1            |
| 05.6101   | Stirrers to Butyra test                                 | 200          |

### Water Distribution in Butter

With the Wator quick testing kit, you can determine the size and number of water droplets in butter quickly and easily. The water droplets are shown as dark blue colored spots whose number and size are considered as a standard for water distribution. The assessment is based on a 5-point rating system (DIN 10311).

| Order No. | Type  | Qty per unit |
|-----------|---|--------------|
| 7.075920  | Water butter test paper, papersize 78 x 40 mm | 50           |

### Loops according to Prof. Burri with Handle

Platinum wire Ø 0.5 x 60 mm, 10 % iridium, with an aluminum handle and removable cap.

| Order No. | Type                                  | Qty per unit |
|-----------|---------------------------------------|--------------|
| 06.0000   | Loop Ø: 1.3 mm, loop volume: 0.001 ml | 1            |
| 06.0001   | Loop Ø: 1.5 mm, loop volume: 0.001 ml | 1            |
| 06.0002   | Loop Ø: 3.0 mm, loop volume: 0.01 ml  | 1            |
| 06.0003   | Loop Ø: 2.5 mm, loop volume: 0.01 ml  | 1            |
| 06.0004   | Without loop                          | 1            |



06.0001

### Loops according to Prof. Burri without Handle

Platinum wire Ø 0.5 x 65 mm, 10 % iridium.

| Order No. | Type                                  | Qty per unit |
|-----------|---------------------------------------|--------------|
| 06.0010   | Loop Ø: 1.3 mm, loop volume: 0.001 ml | 1            |
| 06.0011   | Loop Ø: 1.5 mm, loop volume: 0.001 ml | 1            |
| 06.0012   | Loop Ø: 3.0 mm, loop volume: 0.01 ml  | 1            |
| 06.0013   | Loop Ø: 2.5 mm, loop volume: 0.01 ml  | 1            |

### Loop Holder

| Order No. | Type   | Qty per unit |
|-----------|--|--------------|
| 9.160020  | Dissecting needle holder acc. to Kolle with wire Ø 0.3 to 0.7 mm | 1            |



### Platinum Wire

10 % iridium, sold per cm.

| Order No. | Type     | Qty per unit |
|-----------|----------|--------------|
| 06.0005   | Ø 0.5 mm | 1            |
| 06.0006   | Ø 0.6 mm | 1            |
| 06.0007   | Ø 0.8 mm | 1            |

### Platinum Loop

For Thompson method, cannula Ø 3.0/2.4 mm, loop Ø 1.3 mm, length approx. 30 mm, permanently welded.

| Order No. | Type  | Qty per unit |
|-----------|---|--------------|
| 06.0021   | Platinum loop with Luer-Lock joint, loop volume: 0.001 ml | 1            |



## Microbiology



### Self Filling Syringes Dosys™

Precise dosing with perfect tightness without gasket, corrosion resistant, high chemical resistance, fully assembled, can be autoclaved at 121 °C

Packaging of Dosys™ 172 includes: syringe, PVC protection sleeve

Packaging of Dosys™ 173 includes: syringe, 1 m silicone hose, suction cup, PVC protection sleeve, aspiration and vent cannulas, valve replacement set

Packaging of Dosys™ 174 includes: syringe, 1 m silicone hose, suction cup, PVC protection sleeve, ventilation and dosing cannulas, valve replacement set

| Order No. | Type  | Qty per unit |
|-----------|---|--------------|
| 9.411527  | Dosys™ basic 172, volume: 1 to 10 ml, without a revolver handle           | 1            |
| 6.205165  | Dosys™ classic 173, volume: 0.1 to 1 ml, with a revolver handle           | 1            |
| 9.411521  | Dosys™ premium 174, volume: 0.3 to 2 ml, with a removable revolver handle | 1            |

### Dilution Pipets

Brown graduated.

| Order No. | Type   | Qty per unit |
|-----------|--|--------------|
| 06.0100   | Ring marks at 1 and 1.1 ml, with tapered mid section         | 1            |
| 06.0101   | Ring marks at 1, 2, 2.1 and 2.2 ml, with tapered mid section | 1            |
| 06.0102   | Graduated from 0 to 1.1 ml, straight shape                   | 1            |

### Bacteriological Pipette

| Order No. | Type                               | Qty per unit |
|-----------|------------------------------------|--------------|
| 06.0105   | 1 ml, sterilizable, straight shape | 1            |

### Durham Tubes

For coliform tests, round bottom, without rim.

| Order No. | Type                             | Qty per unit |
|-----------|----------------------------------|--------------|
| 6.075938  | Ø 7 x 27 mm, made of DURAN glass | 100          |
| 9.190200  | Ø 8 x 40 mm, made of DURAN glass | 100          |
| 6.262604  | Ø 12 x 55 mm, made of PP         | 100          |



### Drigalski Spatula

| Order No. | Type                              | Qty per unit |
|-----------|-----------------------------------|--------------|
| 06.0130   | Length 18 mm, made of DURAN glass | 1            |

### Swabs

| Order No. | Type   | Qty per unit |
|-----------|--|--------------|
| 9.404001  | Disposable cotton swab on wooden stick, length 150 mm, sterile and individually packed | 300          |

## Seal Foil Parafilm® M

Can be stretched up to 200 % and clings around irregular shapes and surfaces. Parafilm M is resistant to many polar substances such as saline solutions, inorganic acids and alkaline solutions for up to 48 hours. After this time it may become brittle. Parafilm M conforms to general FDA requirements if used below 55 °C.

Parafilm M data:

|   |  |
|---|--|
| Toxicity:   | Non-toxic                              |
| Melting temperature:  | 60 °C                                  |
| Burning point:  | 301 °C                                 |
| Continued use temperature:  | -45 to +50 °C                          |
| Stretching ability:   | 200 %                                  |
| Elongation at tear:   | 300 %                                  |
| Gas permeability over 24 hours at 23°C and 50 % relative air humidity:    |  |
| O <sub>2</sub> (Oxygen):  | ≤ 350 cm <sup>3</sup> /m <sup>2</sup>  |
| N <sub>2</sub> (Nitrogen):  | ≤ 105 cm <sup>3</sup> /m <sup>2</sup>  |
| CO <sub>2</sub> (Carbon dioxide):   | ≤ 1100 cm <sup>3</sup> /m <sup>2</sup> |
| Water vapor permeability in 24 h at 37 °C and 90 % relative air humidity: | 0.8 g/m <sup>2</sup>                   |



| Order No. | Type                           | Qty per unit |
|-----------|--------------------------------|--------------|
| 9.170003  | Parafilm M, WxD: 75 m x 50 mm  | 1            |
| 9.170002  | Parafilm M, WxD: 38 m x 100 mm | 1            |
| 9.170005  | Parafilm M, WxD: 75 m x 100 mm | 1            |

## Test Strips QUANTOFIX

For semi-quantitative determinations, packs with strips (6 x 95 mm).

| Order No. | Type   | Qty per unit |
|-----------|--|--------------|
| 9.130427  | Peroxide 25, measuring range: 0 to 25 mg/l H <sub>2</sub> O <sub>2</sub>     | 100          |
| 9.130411  | Peroxide 100, measuring range: 0 to 100 mg/l H <sub>2</sub> O <sub>2</sub>   | 100          |
| 9.130426  | Peroxide 1000, measuring range: 0 to 1000 mg/l H <sub>2</sub> O <sub>2</sub> | 100          |



## Test Strips MERCKOQUANT

For fast detection of residual peroxide in UHT milk. reaction time 15 sec.

| Order No. | Type  | Qty per unit |
|-----------|---|--------------|
| 9.129934  | Peroxide, measuring range: 0.5 to 25 mg/l H <sub>2</sub> O <sub>2</sub> | 100          |



**Culture media bottles can be obtained from our online shop**

## Microbiology

### ERLENMEYERCAP and LABOCAP

Material:  
Aluminum: colored anodized

Specifications:  
Caps seal sterile but not hermetically. Steel springs clamp onto the outer wall of the container.

Benefits:  
Stainless, washable, reusable, heat-resistant, sterilizable, various. Colors for better recognition (green, yellow, violet and black are special colors additional charge), very good adhesion, air circulation is ensured.

Cleaning advice:  
The colored anodized coating on the aluminum caps is not resistant to alkaline detergent.  
For cleaning, use a mild neutral detergent.



### ERLENMEYERCAP without Handle

Caps for culture bottles (without beaded rim) and culture medium bottles with a straight neck (Ø 38 mm).

| Order No. | For glasses with Ø mm | Color  | Qty per unit |
|-----------|-----------------------|--------|--------------|
| 9.231457  | 37 / 39               | Blue   | 10           |
| 9.231458  | 37 / 39               | Red    | 10           |
| 9.231456  | 37 / 39               | Silver | 10           |
| 23.21231  | 37 / 39               | Green  | 10           |
| 23.21232  | 37 / 39               | Yellow | 10           |
| 23.21233  | 37 / 39               | Violet | 10           |
| 23.21234  | 37 / 39               | Black  | 10           |



### LABOCAP with Handle

| Order No. | For glasses with Ø mm | Color  | Qty per unit |
|-----------|-----------------------|--------|--------------|
| 9.231403  | 15 / 16               | Blue   | 100          |
| 9.231413  | 15 / 16               | Red    | 100          |
| 9.231345  | 15 / 16               | Silver | 100          |
| 9.231327  | 15 / 16               | Green  | 100          |
| 9.231326  | 15 / 16               | Yellow | 100          |
| 9.231329  | 15 / 16               | Violet | 100          |
| 9.231328  | 15 / 16               | Black  | 100          |
| 23.21043  | 17 / 18               | Blue   | 100          |
| 23.21042  | 17 / 18               | Red    | 100          |
| 9.231347  | 17 / 18               | Silver | 100          |
| 9.231331  | 17 / 18               | Green  | 100          |
| 9.231330  | 17 / 18               | Yellow | 100          |
| 9.231333  | 17 / 18               | Violet | 100          |
| 9.231332  | 17 / 18               | Black  | 100          |

**LABOCAP without Handle**

| Order No. | For glasses with Ø mm | Color  | Qty per unit |
|-----------|-----------------------|--------|--------------|
| 9.231421  | 9 / 10                | Blue   | 100          |
| 9.231441  | 9 / 10                | Red    | 100          |
| 9.231369  | 9 / 10                | Silver | 100          |
| 23.21210  | 9 / 10                | Green  | 100          |
| 23.21212  | 9 / 10                | Yellow | 100          |
| 23.21213  | 9 / 10                | Violet | 100          |
| 23.21214  | 9 / 10                | Black  | 100          |
| 9.231422  | 12 / 13               | Blue   | 100          |
| 9.231442  | 12 / 13               | Red    | 100          |
| 9.231372  | 12 / 13               | Silver | 100          |
| 9.231463  | 12 / 13               | Green  | 100          |
| 9.231460  | 12 / 13               | Yellow | 100          |
| 9.231335  | 12 / 13               | Violet | 100          |
| 9.231334  | 12 / 13               | Black  | 100          |
| 9.231423  | 14 / 15               | Blue   | 100          |
| 9.231443  | 14 / 15               | Red    | 100          |
| 9.231374  | 14 / 15               | Silver | 100          |
| 23.21215  | 14 / 15               | Green  | 100          |
| 23.21216  | 14 / 15               | Yellow | 100          |
| 23.21217  | 14 / 15               | Violet | 100          |
| 23.21218  | 14 / 15               | Black  | 100          |
| 9.231424  | 15 / 16               | Blue   | 100          |
| 9.231444  | 15 / 16               | Red    | 100          |
| 9.231375  | 15 / 16               | Silver | 100          |
| 9.231464  | 15 / 16               | Green  | 100          |
| 9.231461  | 15 / 16               | Yellow | 100          |
| 9.231336  | 15 / 16               | Violet | 100          |
| 9.231466  | 15 / 16               | Black  | 100          |
| 9.231425  | 17 / 18               | Blue   | 100          |
| 9.231445  | 17 / 18               | Red    | 100          |
| 9.231377  | 17 / 18               | Silver | 100          |
| 9.231465  | 17 / 18               | Green  | 100          |
| 9.231462  | 17 / 18               | Yellow | 100          |
| 9.231338  | 17 / 18               | Violet | 100          |
| 9.231337  | 17 / 18               | Black  | 100          |



**Microbiology**



| <b>LABOCAP without Handle</b> |                              |              |                     |
|-------------------------------|------------------------------|--------------|---------------------|
| <b>Order No.</b>              | <b>For glasses with Ø mm</b> | <b>Color</b> | <b>Qty per unit</b> |
| 9.231426                      | 19 / 20                      | Blue         | 100                 |
| 9.231446                      | 19 / 20                      | Red          | 100                 |
| 9.231379                      | 19 / 20                      | Silver       | 100                 |
| 9.231340                      | 19 / 20                      | Green        | 100                 |
| 9.231339                      | 19 / 20                      | Yellow       | 100                 |
| 9.231342                      | 19 / 20                      | Violet       | 100                 |
| 9.231341                      | 19 / 20                      | Black        | 100                 |
| 9.231427                      | 21 / 23                      | Blue         | 100                 |
| 9.231447                      | 21 / 23                      | Red          | 100                 |
| 9.231381                      | 21 / 23                      | Silver       | 100                 |
| 23.21219                      | 21 / 23                      | Green        | 100                 |
| 23.21220                      | 21 / 23                      | Yellow       | 100                 |
| 23.21221                      | 21 / 23                      | Violet       | 100                 |
| 23.21222                      | 21 / 23                      | Black        | 100                 |
| 9.231428                      | 24 / 26                      | Blue         | 100                 |
| 9.231448                      | 24 / 26                      | Red          | 100                 |
| 9.231385                      | 24 / 26                      | Silver       | 100                 |
| 23.21223                      | 24 / 26                      | Green        | 100                 |
| 23.21224                      | 24 / 26                      | Yellow       | 100                 |
| 23.21225                      | 24 / 26                      | Violet       | 100                 |
| 23.21226                      | 24 / 26                      | Black        | 100                 |
| 9.231429                      | 28 / 30                      | Blue         | 100                 |
| 9.231449                      | 28 / 30                      | Red          | 100                 |
| 9.231388                      | 28 / 30                      | Silver       | 100                 |
| 23.21227                      | 28 / 30                      | Green        | 100                 |
| 23.21228                      | 28 / 30                      | Yellow       | 100                 |
| 23.21229                      | 28 / 30                      | Violet       | 100                 |
| 23.21230                      | 28 / 30                      | Black        | 100                 |

## Colony Counter ColonyCount V

To count bacterial colonies with reliability and efficiency.

Novelties of our ColonyCount V:

- Ergonomic and optimized design
- Unique Light Disperse Grating (LDG)
- Adjustable background and side lighting
- Multifunctional graphic display
- Acoustic and optical count signal
- Data storage and data management
- Wide variety of optional accessories

Specifications:

- Intelligent, reliable, accurate and fatigue-free counting out of Petri dishes
- Uniform illumination of the counting area
- Glare-free working
- User-friendly menu-driven operation
- Seamless documentation (GLP)
- Display :                      Graphic display with keypad
- Standard magnifier:        Dual magnification
- Illumination:                LED side and from below (LDG)
- Petri dishes:                Ø to 120 mm
- Voltage:                      100 - 240 VAC/50 - 60 Hz

Included in the delivery:

- 06.140009                  Wolffhuegel disk, grid 1 cm<sup>2</sup> and 1/9 cm<sup>2</sup>
- 06.140019                  Adapter for petri dishes Ø 120/90 mm
- 06.1303                      High quality magnifier with a flexible mount
- 06.1305                      External power supply
- 06.1311                      Quick start guide
- 06.1315                      User manual on CD
- 25.6030                      Permanent marker black



| Order No. | Type          | Qty per unit |
|-----------|---------------|--------------|
| 06.1300   | ColonyCount V | 1            |

## Microbiology



06.140024



06.1303

### Accessories and Consumables for ColonyCount V

| Order No. | Type  | Qty per unit |
|-----------|---|--------------|
| 06.130003 | Thermo printer for ColonyCount V                                | 1            |
| 50.250113 | Thermo printer paper  | 1            |
| 06.130004 | Cable for printer RS232   | 1            |
| 06.1313   | Memory card 2 GB  | 1            |
| 06.1399   | Software and cable  | 1            |
| 06.1410   | Sensor pen for external counting                                | 1            |
| 06.1411   | Spare pen for external counting (06.1410)                       | 1            |
| 06.140024 | Adapter set for petri dishes Ø 120-50/60/80/90 mm               | 1            |
| 06.1307   | Adapter for petri dishes Ø 120/50 mm                            | 1            |
| 06.1308   | Adapter for petri dishes Ø 120/60 mm                            | 1            |
| 06.1309   | Adapter for petri dishes Ø 120/80 mm                            | 1            |
| 06.140019 | Adapter for petri dishes Ø 120/90 mm                            | 1            |
| 06.140009 | Wolffhuegel disk, grid 1cm <sup>2</sup> and 1/9 cm <sup>2</sup> | 1            |
| 25.6030   | Permanent marker black  | 1            |
| 06.1303   | High quality magnifier with a flexible mount                    | 1            |

### 3M™ Petrifilm™

Ready for use, simple and fast microbiological test without much of the laboratory work. Petrifilm consists of two sheets that contain all the substances needed for bacteria growth. Petrifilm is usually used with 1 ml samples (direct or after dilution), inoculated and then incubated. After this, the colonies can be counted straightaway. Also applicable for air samples and surface checks.

| Order No. | Type  | Qty per unit |
|-----------|---|--------------|
| 06.1920   | Aerobe total viable count (TVC)<br>For the detection of lactic acid bacteria in food samples.<br>incubation time: 48 h<br>contents: 2 bags with 50 pieces   | 100          |
| 06.1921   | High sensitive coliform counting plate<br>Count red colonies as confirmed coliforms to detect low coliform concentrations in the dairy industry.<br>incubation time: 24 h<br>contents: 2 bags with 25 pieces  | 50           |
| 06.1922   | E.coli /coliform counting plate<br>Count red and blue colonies as confirmed coliforms.<br>Count blue colonies as confirmed E. Coli.<br>incubation time: 24 to 48 h.<br>contents: 2 bags with 25 pieces.   | 50           |
| 06.1923   | Yeast and mold counting plate<br>Differentiation of yeasts and molds and determination of their bacterial counts.<br>incubation time: 3 to 5 days<br>contents: 2 bags with 50 pieces  | 100          |
| 06.1924   | Enterobacteriaceae counting plate<br>Determination of the Enterobacteriaceae count and the number of potential pathogens to detect impurities in the manufacturing environment and in food sample.<br>incubation time: 22 h<br>contents: 2 bags with 25 pieces      | 50           |
| 06.1926   | Plates reader<br>Allows in four seconds, the continuous and automatic reading and storing of the results of 3M™ Petrifilm™ Plates (aerobic plate count, coliform number, E. coli / coliform number, enterobacteria number).<br>incl. software for data transmission | 1            |

### Incubators

Specifications:

- Natural convection
- Temperature range: + 5 °C above ambient to +70 °C
- Digital controller
- 2 shelves of stainless steel
- Calibration certificate (37 °C)
- 230 VAC



| Order No.   | Type   | Qty per unit |
|-------------|--|--------------|
| 30GI.603010 | Incubator TSI 16, volume 16 l, power 85 W<br>int. dimensions (WxDxH): 270 x 255 x 230 mm<br>ext. dimensions (WxDxH): 505 x 400 x 370 mm  | 1            |
| 30GI.603020 | Incubator TSI 35, volume 35 l, power 125 W<br>int. dimensions (WxDxH): 360 x 320 x 300 mm<br>ext. dimensions (WxDxH): 595 x 460 x 440 mm | 1            |

**Matching petri dishes can be obtained from our online shop**

## Heat treatment tests



### Phosphatase Test Lactognost

For the detection of alkaline phosphatase in milk, whey, cream and butter.  
 The test allows the testing of sufficient short time heating up of milk and related products, and the detection of raw milk in pasteurized milk.

| Order No. | Type  | Qty per unit |
|-----------|---|--------------|
| 06.2010   | Kit with reagents for 100 tests, dosing spoon, color comparative table and instructions for use | 1            |

### Phosphatase Test acc. to Aschaffenburg and Mullen

Fast and simple method with a convenient comparator for the reliable evaluation of color change (reagents on request).

| Order No. | Type                      | Qty per unit |
|-----------|---------------------------|--------------|
| 9.947150  | Comparator 2000           | 1            |
| 6.072147  | Milk viewing stand DB 415 | 1            |
| 7.072177  | Color disc APTW           | 1            |
| 06.2033   | Test tube AF 215 TT       | 1            |

### Strip Cup

| Order No. | Type  | Qty per unit |
|-----------|---|--------------|
| 06.2050   | For visual inspection of milk consistency and separation of the germ-rich first spray of milk from the rest of milking. Practical fittings, made of durable plastic with black inlay, suitable as a measuring vessel. | 1            |



### Schalm Test Paddle

| Order No. | Type   | Qty per unit |
|-----------|--|--------------|
| 06.2051   | To carry out California mastitis tests according to Schalm. A milk sample (approx. 2 ml) is added from every udder quarter to each well. | 1            |



### Schalm Test Solution

| Order No. | Type  | Qty per unit |
|-----------|---|--------------|
| 06.2052   | A test liquid to determine the cell content of raw milk with ease and safety. As of 100.000 cells/ml, there is a visible reaction with the test solution and the milk sample. | 1            |

### Centrifuge Tubes for Leucocytes Test

| Order No. | Type   | Qty per unit |
|-----------|--|--------------|
| 06.2060   | According to Trommsdorff, 10 ml with graduated capillary tip | 1            |
| 06.2061   | According to Skar, 10 ml with conical graduated tip          | 1            |



06.2060

### Whiteside Test

Leach test to rapidly detect somatic cells in milk samples.  
Fresh milk is mixed with NaOH in a 3:1 ratio for about 30 seconds.  
Threads or lumps form clots are assessed as positive.

Included in the delivery:

- 06.20700 Black glass plate for 24 samples
- 06.20701 Applicator stick
- 06.20702 Pipette
- 06.20703 Spatula
- 06.20713 Comparison chart

| Order No. | Type                    | Qty per unit |
|-----------|-------------------------|--------------|
| 06.2070   | Whiteside test complete | 1            |



## Reduction test

### Reduction Test

The reduction test is used to test the bacteriological quality and shelf life of milk.

Equipment for reduction tests:

Waterbaths: see on p. 19

Ovens: see on p. 30

### Test Tubes for Reduction Test

Strong walled DURAN glass, with a frosted label.

| Order No. | Type                                  | Qty per unit |
|-----------|---------------------------------------|--------------|
| 06.3000   | Ø 16 x 130 mm, ring mark: 10 ml       | 100          |
| 06.3001   | Ø 13 x 140 mm, ring mark: 10 ml       | 100          |
| 06.3002   | Ø 17 x 180 mm, ring marks: 10 + 20 ml | 100          |
| 06.3003   | Ø 17 x 180 mm, ring mark: 20 ml       | 100          |
| 06.3005   | Ø 22 x 195 mm, ring marks: 25 + 40 ml | 100          |



Fig. similar

### Racks for Reduction Test Tubes

Made of stainless steel.

| Order No. | Type  | Qty per unit |
|-----------|---|--------------|
| 06.3011   | Ø 18 mm, dimensions: 240 x 55 mm, for 20 test tubes | 1            |
| 06.3013   | Ø 13 mm, dimensions: 230 x 55 mm, for 34 test tubes | 1            |

### Accessories and Consumables for Reduction Test

| Order No. | Type  | Qty per unit |
|-----------|---|--------------|
| 06.3015   | Dispenser gun DO 55 for repetitive dispensing of 1.5 ml or 1 ml coloring solution (spare glasses no longer available)             | 1            |
| 06.3016   | Methylene blue pipet, with bulb, 1 ml: 0.25, graduated  | 1            |
| 06.3020   | Methylene blue tablets, rapidly and entirely dissolvable, constant staining quality, box with 50 tablets for 800 ml solution each | 50           |
| 06.3033   | Resazurin tablets, UK standard, box with 100 tablets  | 100          |
| 06.3022   | Resazurin color comparison table  | 1            |

**More racks for test tubes available on request**

## Sediment test

### Sediment Test Pump

| Order No. | Type   | Qty per unit |
|-----------|--|--------------|
| 06.8000   | Acrylic glass tube 500 ml and nickel plated fittings, suction tube and ventilation tube hinged to accept filter discs, filtering surface Ø 18 mm, for filter cards and cotton wool filters | 1            |



### Sediment Tester Gerber

| Order No. | Type   | Qty per unit |
|-----------|--|--------------|
| 06.8010   | Sediment tester Gerber foldable aluminum bottle 500 ml, with drain hose and clamp to attach it to the edge of the table, filtering surface Ø 18 mm, for filter plates and cotton filters | 1            |
| 06.8030   | Matching pressure air blower to speed up the filtration process  | 1            |



### Sediment Tester Rapido

With an electric vacuum pump for the rapid sucking through of milk samples, hinged aluminum bottle 500 ml, filtering surface Ø 18 mm, for filter plates and cotton filters. Particularly suitable for serial dirt sample determinations.

| Order No.   | Type                                  | Qty per unit |
|-------------|---------------------------------------|--------------|
| 06.8040     | Sediment tester Rapido, 230 VAC/50 Hz | 1            |
| 06.8040-115 | Sediment tester Rapido, 115 VAC/60 Hz | 1            |



### Filter Funnel for Sediment Test

| Order No. | Type  | Qty per unit |
|-----------|---|--------------|
| 06.8015   | Filter funnel for sediment testing made of stainless steel, mesh bottom for round filter Ø 32mm | 1            |



### Filter for Sediment Test

| Order No. | Type  | Qty per unit |
|-----------|---|--------------|
| 06.8050   | Filter cards for sediment tests dimensions: 80 x 45 mm  | 500          |
| 06.8052   | Round filters for dirt test in milk Ø 32 mm, mass per unit area 130 g/m <sup>2</sup> , thickness 1.0 mm | 1000         |
| 06.8052S  | Round filters for dirt test in milk Ø 32 mm, mass per unit area 130 g/m <sup>2</sup> , thickness 1.2 mm | 1000         |



06.8050

### Comparison Table for Sediment Test

| Order No. | Type  | Qty per unit |
|-----------|---|--------------|
| 06.8060   | A5-format, in color with 5 grades for filtered and not filtered milk (acc. to Swiss standard), text in 4 languages (English, French, German, Spanish) | 1            |

## Acidity determination

### Acidity Determination according to Salut

Quick method:

Mixing of 2 ml of milk and 2 ml Alizarol (red liquor) in the tester, mixture runs into the sample vial, assessment by discoloration.



#### Acidimeter Salut

| Order No. | Type   | Qty per unit |
|-----------|--|--------------|
| 07.0010   | Acidimeter Salut<br>made of stainless steel, including 2 test tubes with drain holes   | 1            |
| 07.0011   | Spare test tube for Salut  | 1            |
| 07.0030   | Color comparison table for acidity test with 5 color grades<br>for acidity degrees between 6.5 and 12°SH,<br>in 4 languages (English, French, German, Spanish) | 1            |

### Acidity Determination by Titration according to Soxhlet-Henkel

Definition:

The acidity Soxhlet-Henkel is the amount ml 0.25 N sodium hydroxide consumed in the titration of 100 ml of milk to a standard color (pink). The test method is applicable to uncolored milk and dairy products.



Fig. similar

#### Automatic Acidity Buret Soxhlet-Henkel

Buret for direct reading in °SH based on 25 ml milk sample, automatic self zeroing, Schellbach stripping.

| Order No. | Type   | Qty per unit |
|-----------|--|--------------|
| 07.0100   | Buret: 0 to 25 °SH : 1/10 °SH, polyethylene reservoir 500 ml with base | 1            |
| 07.0110   | Buret: 0 to 40 °SH : 1/5 °SH, polyethylene reservoir 1000 ml with base | 1            |
| 07.0101   | Spare buret 0 to 25 °SH : 1/10 °SH                                     | 1            |
| 07.0111   | Spare buret 0 to 40 °SH : 1/5 °SH                                      | 1            |

#### Accessories for Acidity Determination acc. to Soxhlet-Henkel

| Order No. | Type   | Qty per unit |
|-----------|--|--------------|
| 07.0120   | Milk pipet 25 ml, made of DURAN glass with large outlet                          | 1            |
| 20.0009   | Graduated pipette, made of DURAN glass   |              |
| 06.3005   | Test tubes for 25 ml milk (see on p. 56)   | 100          |
| 23.0721   | Test tube rack, for 36 samples, made of stainless steel<br>hole size: 26 x 26 mm | 1            |
| 23.0722   | Test tube rack, for 48 samples, made of stainless steel<br>hole size: 26 x 26 mm | 1            |
| 23.0723   | Test tube rack, for 18 samples, made of stainless steel<br>hole size: 26 x 26 mm | 1            |
| 23.0724   | Test tube rack, for 12 samples, made of stainless steel<br>hole size: 26 x 26 mm | 1            |

**Chemicals on request**

### Acidity Determination by Titration according to Peter

Definition:

1 °SH = x ml sodium hydroxide 0.25 N to 10 ml milk.

Quick method according to the same principle as Soxhlet Henkel, is often used by cheese makers.

### Automatic Acidity Buret Schilling

Direct reading in °SH when using 10 ml of milk, automatic self zeroing, Schellbach stripping.

| Order No. | Type   | Qty per unit |
|-----------|--|--------------|
| 20.0804   | 0 to 5 ml: 0.05 (0 to 50 °SH), polyethylene reservoir 500 ml with base   | 1            |
| 20.0805   | 0 to 10 ml: 0.05 (0 to 100 °SH), polyethylene reservoir 500 ml with base | 1            |

### Accessories for Acidity Determination acc. to Peter

| Order No. | Type   | Qty per unit |
|-----------|--|--------------|
| 07.0130   | Milk pipette Peter 10 ml   | 1            |
| 07.0131   | Graduated pipette 1 ml (0 to 10 °SH)   | 1            |
| 07.0132   | Graduated pipette 3 ml (0 to 30 °SH)   | 1            |
| 07.0133   | Graduated pipette 4 ml (0 to 40 °SH)   | 1            |
| 06.3000   | Test tubes Ø 16 x 130 mm (see on p. 56)  | 100          |
| 06.3001   | Test tubes Ø 13 x 140 mm (see on p. 56)  | 100          |
| 23.0710   | Test tube rack, for 12 samples, made of stainless steel<br>hole size: 21 x 21 mm | 1            |
| 23.0711   | Test tube rack, for 18 samples, made of stainless steel<br>hole size: 21 x 21 mm | 1            |
| 23.0713   | Test tube rack, for 36 samples, made of stainless steel<br>hole size: 21 x 21 mm | 1            |
| 23.0714   | Test tube rack, for 48 samples, made of stainless steel<br>hole size: 21 x 21mm  | 1            |



Fig. similar

**Chemicals on request**

## Acidity determination

### Acidity Determination by Titration according to Dornic

Definition:

Acidity according to Dornic is the amount ml 0.1 N sodium hydroxide consumed in the titration of 100 ml of milk to a standard color (pink) ( $1\text{ }^{\circ}\text{D} = 0.444\text{ }^{\circ}\text{S}$ ). The test method is applicable to milk and other uncolored dairy products.

### Automatic Acidity Buret Dornic

With direct division in  $^{\circ}\text{D}$  bases on 10 ml milk, automatic self zeroing, Schellbach stripping.

| Order No. | Type  | Qty per unit |
|-----------|---|--------------|
| 07.0150   | 0 to 40 $^{\circ}\text{D}$ , polyethylene reservoir 500 ml with base  | 1            |
| 07.0151   | 0 to 100 $^{\circ}\text{D}$ , polyethylene reservoir 500 ml with base | 1            |
| 07.01500  | Spare buret 0 to 40 $^{\circ}\text{D}$                                | 1            |
| 07.01510  | Spare buret 0 to 100 $^{\circ}\text{D}$                               | 1            |



07.0151

**Chemicals on request**

## pH Cheese Set

For the easy pH measuring in cheese and other solid or semi-solid dairy products.

Included in the delivery:

- 50.2AA112-KE pH/mV pocket meter with large LCD display
- 50.1510 Gerber pH probe
- 50.1200 1 m cable with DIN connector for pH and redox electrodes
- 50.1550 Gerber temperature probe type TFK (1 m cable)
- Carrying case with buffer solutions STP 4 and STP 7 (50 ml)
- Accessories: stand, beaker, CD-ROM and batteries



| Order No.    | Type                  | Qty per unit |
|--------------|-----------------------|--------------|
| 50.pH3110-KE | pH cheese set 3110/GI | 1            |

## Consumables for pH Cheese Set

| Order No. | Type   | Qty per unit |
|-----------|--|--------------|
| 50.1510   | Gerber pH probe  | 1            |
| 50.1200   | 1 m cable with DIN connector for pH and redox electrodes | 1            |
| 50.1550   | Gerber temperature probe type TFK (1 m cable)            | 1            |
| 50.108800 | Technical buffer solution TPL 4, 250 ml                  | 1            |
| 50.108802 | Technical buffer solution TPL 7, 250 ml                  | 1            |
| 50.108804 | Technical buffer solution TPL 10, 250 ml                 | 1            |



50.1510

## pH measurement



### pH 7 - Handheld Meters Set/Basic

Ergonomic and rugged portable measuring instrument with additional protective casing, protection: IP 57, large display, BNC connection for pH probe, RCA socket for temperature probe, 3 x 1.5 V batteries (AA).

Functions:

- Simultaneous display of pH/mV and temperature
- Selectable resolution 0.1/0.01 pH
- Automatic calibration 1-, 2- or 3-point with standard buffers
- Manual calibration 1- or 2-point with custom buffers

Included in the delivery:

- pH meter
- Probe
- Buffer solutions
- KCl solution
- Carrying case

| Order No.   | Type  | Qty per unit |
|-------------|---|--------------|
| 30GI.101020 | pH 7 set milk/basic, incl. pH probe with temperature sensor inside  | 1            |
| 30GI.101030 | pH 7 set cheese/basic, incl. pH penetration probe with temperature sensor inside  | 1            |
| 30GI.101040 | pH 7 set meat/basic, incl. pH penetration probe with temperature sensor inside (probe: shaft and blade tip made of stainless steel) | 1            |



### pH 70 - Handheld Meters Set/Advanced

Ergonomic and rugged portable measuring instrument with additional protective casing, protection: IP 57, large backlit display, BNC connection for pH probe, RCA socket for temperature probe, 3 x 1.5 V batteries (AA).

Functions:

- Simultaneous display of pH/mV and temperature
- Selectable resolution 0.1/0.01 pH
- Automatic calibration 1-, 2- or 3-point calibration with standard buffers
- Manual calibration 1- or 2-point with custom buffers
- Definition of calibration cycles
- GLP
- Data logger with up to 500 data sets
- USB port for data transfer to PC
- Software for data transfer

Included in the delivery:

- pH meter
- Probe
- Buffer solutions
- KCl solution
- Software, power supply, USB cable
- Carrying case

| Order No.   | Type  | Qty per unit |
|-------------|---|--------------|
| 30GI.102020 | pH 70 set milk/advanced, incl. pH probe with temperature sensor inside  | 1            |
| 30GI.102030 | pH 70 set cheese/advanced, incl. pH penetration probe with temperature sensor inside  | 1            |
| 30GI.102040 | pH 70 set meat/advanced, incl. pH penetration probe with temperature sensor inside (probe: shaft and blade tip made of stainless steel) | 1            |

### Consumables for pH 7 and pH 70

| Order No.   | Type  | Qty per unit |
|-------------|---|--------------|
| 30GI.107020 | pH probe with included temperature sensor, BNC/RCA, 1 m cable, suitable for milk, drinks and other liquids  | 1            |
| 30GI.107030 | pH penetration probe with included temperature sensor, BNC/RCA, 1 m cable, suitable for cheese and semi-solid products  | 1            |
| 30GI.107040 | pH penetration probe with included temperature sensor, BNC/RCA, 1 m cable, suitable for meat, sausages etc.<br>probe: shaft and blade tip made of stainless steel | 1            |
| 30GI.108010 | Technical buffer solution pH 4, 250 ml  | 1            |
| 30GI.108020 | Technical buffer solution pH 7, 250 ml  | 1            |
| 30GI.108030 | Technical buffer solution pH 10, 250 ml   | 1            |
| 30GI.108015 | Technical buffer solution pH 4, 500 ml  | 1            |
| 30GI.108025 | Technical buffer solution pH 7, 500 ml  | 1            |
| 30GI.108035 | Technical buffer solution pH 10, 500 ml   | 1            |

### pH Tester - pH 5 Set

pH stick with LCD display, protection: IP 67, 4 x 1.5 V batteries (AAA).

Functions:

- Display of pH/mV and temperature
- Measuring range: -2 to 16 pH/±500 mV
- Temperature: 0 to 50 °C
- 1- to 3-point calibration

Included in the delivery

- pH stick
- Probe (exchangeable)
- pH buffer- and storage solution
- Carrying case



| Order No.   | Type                           | Qty per unit |
|-------------|--------------------------------|--------------|
| 30GI.103050 | pH tester pH 5 set             | 1            |
| 30GI.103060 | pH 51 spare probe for pH 5 set | 1            |

### pH Tester - pH 5 Set for Food

pH stick with pH penetration probe.

Functions and included accessories are the same as for pH tester pH 5 set.

| Order No.   | Type                                     | Qty per unit |
|-------------|--|--------------|
| 30GI.103051 | pH tester pH 5 set for food              | 1            |
| 30GI.103061 | SpH 51 spare probe for pH 5 set for food | 1            |



## Conductivity measurement



### Cond 7 - Handheld Meters Set/Basic

Ergonomic and rugged handheld instrument with additional protective casing, protection: IP 57, large display, BNC connection for conductivity probe, RCA socket for temperature probe, 3 x 1.5 V batteries (AA).

Functions:

- Display conductivity and temperature simultaneously
- Automatic calibration 1- to 4-point with conductivity standards
- Manual calibration 1-point with a custom standard
- Automatic and manual compensation of temperature with reference value 15 to 30°C

Included in the delivery:

- Conductivity meter
- With/without probe
- Conductivity solutions
- Carrying case

| Order No.   | Type  | Qty per unit |
|-------------|---|--------------|
| 30GI.201010 | Cond 7 set/basic, without probe                           | 1            |
| 30GI.201020 | Cond 7 set/basic, incl. cond probe 2301T (10 µS - 200 mS) | 1            |



### Cond 70 - Handheld Meters Set/Advanced

Ergonomic and rugged handheld instrument with additional protective casing, protection: IP 57, large backlit display, BNC connection for conductivity probe, RCA socket for temperature probe, 3 x 1.5 V batteries (AA).

Functions:

- Display conductivity and temperature simultaneously
- Automatic calibration 1- to 4-point with conductivity standards
- Manual calibration 1-point with a custom standard
- Automatic and manual compensation of temperature with reference value 15 to 30°C
- TDS measurement with adjustable factor
- GLP
- Data logger, manual and automatic with 500 memory values with date and time
- USB port for data transfer to PC
- Software for data transfer

Included in the delivery:

- Conductivity meter
- With/without probe
- Conductivity solutions
- Software, power supply, USB cable
- Carrying case

| Order No.   | Type   | Qty per unit |
|-------------|--|--------------|
| 30GI.202010 | Cond 70 set/Advanced without probe                           | 1            |
| 30GI.202020 | Cond 70 set/Advanced incl. cond probe 2301T (10 µS - 200 mS) | 1            |

## Conductivity measurement

### Consumables for Cond 7 and Cond 70

| Order No.   | Type  | Qty per unit |
|-------------|---|--------------|
| 30GI.207020 | Conductivity cell 2301T, measuring range 10 $\mu$ S - 200 mS, with integrated thermometer, 1 m cable  | 1            |
| 30GI.207030 | Conductivity cell VPT51/01, measuring range 0.1 $\mu$ S - 1 mS with integrated thermometer, 1 m cable | 1            |
| 30GI.208010 | Conductivity solution, 500 ml, 84 $\mu$ S/cm  | 1            |
| 30GI.208020 | Conductivity solution, 500 ml, 1413 $\mu$ S/cm  | 1            |
| 30GI.208030 | Conductivity solution, 500 ml, 12880 $\mu$ S/cm   | 1            |

### Conductivity Tester - Cond 5 Set

Stick with LCD display, protection: IP 67, 4 x 1.5 V batteries (AAA).

Functions:

- Display conductivity, TDS and temperature simultaneously
- Measuring range: 0 to 200  $\mu$ S/ 0 to 2000  $\mu$ S/ 0 to 20 mS/ 0.1 ppm to 14 ppt
- Temperature: 0 to 50 °C
- 1- to 3-point calibration

Included in the delivery:

- Cond stick
- Conductivity probe (replaceable)
- Conductivity and storage solutions
- Carrying case



| Order No.   | Type                               | Qty per unit |
|-------------|------------------------------------|--------------|
| 30GI.203050 | Conductivity tester cond 5 set     | 1            |
| 30GI.203060 | Cond 51 spare probe for cond 5 set | 1            |

## Combi analyzer for pH and conductivity measurement



### PC 7 - pH/Cond Handheld Meters Set/Basic

Ergonomic and rugged handheld instrument with additional protective casing, protection: IP 57, large display, BNC connection for pH and conductivity measurement probe, RCA socket for temperature probe, 3 x 1.5 V batteries (AA).

**Functions pH:**

- Display pH/mV and temperature simultaneously
- Selectable resolution: 0.1/0.01 pH
- Automatic calibration up to 3 points with 2 selectable pH buffer sets (USA and NIST)
- Manual calibration up to 2 points with a custom pH buffer

**Functions conductivity:**

- Display conductivity and temperature simultaneously
- Automatic calibration from 1- to 4-points with 4 conductivity standards
- Manual calibration at 1-point with a custom standard
- Automatic and manual compensation of temperature with reference value 15 to 30°C

**Included in the delivery:**

- Combination instrument
- Probes
- Buffer and conductivity solutions
- KCl solution
- Carrying case

| Order No.   | Type  | Qty per unit |
|-------------|---|--------------|
| 30GI.401020 | PC7 set/basic<br>incl. pH probe with integrated NTC temperature sensor and cond probe 2301T | 1            |



### PC 70 - pH/Cond Handheld Meters Set/Advanced

Ergonomic and rugged handheld instrument with additional protective casing, protection: IP 57, large backlit display, BNC connection for pH and conductivity measurement probe, RCA socket for temperature probe, 3 x 1.5 V batteries (AA).

**Functions pH:**

- Display pH/mV and temperature simultaneously
- Selectable resolution: 0.1/0.01 pH
- Automatic calibration up to 3-points with 2 selectable pH buffer sets (USA and NIST)
- Manual calibration up to 2-points with a custom pH buffer

**Functions conductivity:**

- Display conductivity and temperature simultaneously
- Automatic calibration from 1- to 4- points with 4 conductivity standards
- Manual calibration at 1-point with a custom standard
- Automatic and manual compensation of temperature with reference value 15 to 30°C

**Functions in general:**

- TDS measurements
- CAL DUE: set of calibration frequency for high quality of measurements
- GLP
- Datalogger (automatic or manual) 500 data sets with date and time
- USB Port to transfer Data and power by computer or power supply (included)
- Software PC-Link to download data (included)

**Included in the delivery:**

- Combination instrument
- Probes
- Buffer and conductivity solutions
- KCl solution
- Software, power supply, USB cable
- Carrying case

| Order No.   | Type  | Qty per unit |
|-------------|---|--------------|
| 30GI.402020 | PC70 set/advanced<br>incl. pH probe with integrated NTC temperature sensor and cond probe 2301T | 1            |

## Combi analyzer for pH and conductivity measurement

### Consumables for PC 7 and PC 70

| Order No.   | Type   | Qty per unit |
|-------------|--|--------------|
| 30GI.207020 | Conductivity cell 2301T, measuring range 10 µS - 200 mS, with integrated thermometer, 1 m cable  | 1            |
| 30GI.207030 | Conductivity cell VPT51/01, measuring range 0.1 µS - 1 mS with integrated thermometer, 1 m cable | 1            |
| 30GI.208010 | Conductivity solution, 500 ml, 84 µS/cm  | 1            |
| 30GI.208020 | Conductivity solution, 500 ml, 1413 µS/cm  | 1            |
| 30GI.208030 | Conductivity solution, 500 ml, 12880 µS/cm   | 1            |
| 30GI.107020 | pH probe with included temperature sensor, BNC/RCA, 1 m cable                                    | 1            |
| 30GI.107030 | pH penetration probe with included temperature sensor, BNC/RCA, 1 m cable                        | 1            |
| 30GI.108010 | Technical buffer solution pH 4, 250 ml   | 1            |
| 30GI.108020 | Technical buffer solution pH 7, 250 ml   | 1            |
| 30GI.108030 | Technical buffer solution pH 10, 250 ml  | 1            |
| 30GI.108015 | Technical buffer solution pH 4, 500 ml   | 1            |
| 30GI.108025 | Technical buffer solution pH 7, 500 ml   | 1            |
| 30GI.108035 | Technical buffer solution pH 10, 500 ml  | 1            |

### Multiparameter Tester - PC 5 Set

Stick with LCD display, protection: IP 67, 4 x 1.5 V batteries (AAA).

#### Functions:

- Display pH/mV, conductivity, TDS and temperature
- Measuring range pH: -2 to 16 pH/±500 mV
- Measuring range cond: 0 to 200 µS/ 0 to 2000 µS/ 0 to 20 mS/ 0.1 ppm to 14 ppt
- Temperature: 0 to 50 °C
- 1- to 3-point calibration

#### Included in the delivery:

- Multiparameter stick
- pH and cond probe (exchangeable)
- pH buffer-, conductivity- and storage solutions
- Carrying case



| Order No.   | Type                           | Qty per unit |
|-------------|--------------------------------|--------------|
| 30GI.403050 | pH and cond tester PC 5 Set    | 1            |
| 30GI.403060 | PC 51 spare probe for PC 5 set | 1            |

## Detection of fat deterioration

### **Detection of Fat Deterioration (Method MTI)**

The mechanical stress on of milk and cream by cooling, pumps and transporting damaged the fat globules. Thus, the quality is deteriorated. With the method developed by the scientific milk institute of ETH Zurich, sources of damage can quickly, easily and reliably be elicited by stage inspections.

The method is based on 3 analyzes:

- Fat content according to Gerber
- Free fat
- Free fatty acids

The sum of the converted into free fatty acids and the directly measured free fat is the total amount of free fat and is expressed as % free fat of the total fat.



08.2000

### **Specifically Required Equipment for Method MTI**

| Order No.  | Type   | Qty per unit |
|------------|--|--------------|
| 03.3112-12 | Centrifuge Gerber Universal (see on p. 22), 230 VAC, with heating and universal rotor for 12 positions, special insert on request (order separately) | 1            |
| 03.3113-12 | Centrifuge Gerber Universal (see on p. 22), 115 VAC, with heating and universal rotor for 12 positions, special insert on request (order separately) | 1            |
| 08.2010    | Special insert for free fat butyrometers (on request)  | 1            |
| 08.2000    | Free fat butyrometer incl. stopper (03.0920) for evaluation of free fat in milk and cream, scale reading 0.002                                       | 1            |

## Flow Out Viscometer

For quick testing of the viscosity of sour milk products, such as yogurt, sour milk, sour cream and cream .  
Simply fill the funnel with 100 ml, let the sample drain through the outlet valve and measure the time.

Included in the delivery:

- 08.3001 Flow out viscometer with nozzle Ø 2 and 3 mm
- 08.30003 Stand garnish
- Pharmacist patel 130 mm
- Pharmacist patel 200 mm
- Ring for flow out viscometer



| Order No. | Type                         | Qty per unit |
|-----------|------------------------------|--------------|
| 08.3000   | Flow out viscometer complete | 1            |

## Accessories for Flow Out Viscometer

| Order No. | Type   | Qty per unit |
|-----------|--|--------------|
| 08.3002   | Nozzle for viscometer Ø 2 mm   | 1            |
| 08.3003   | Nozzle for viscometer Ø 3 mm   | 1            |
| 08.3004   | Nozzle for viscometer Ø 4 mm   | 1            |
| 08.3005   | Nozzle for viscometer Ø 5 mm   | 1            |
| 08.3006   | Nozzle for viscometer Ø 6 mm   | 1            |
| 08.3008   | Nozzle for viscometer Ø 8 mm   | 1            |
| 9.262410  | Stopwatch<br>Addition stopper Amigo, impact-resistant, unbreakable main spring,<br>ABS case, Ø 55 mm, with lanyard (120 cm),<br>division sec: 1/10, display min: 15  | 1            |
| 9.260189  | Stopwatch<br>Digi clock timer TR 119 OS,<br>large 6-digit LCD display, programmable for up to 23 h, 59 min, 59 sec<br>1-minute audible alarm when timed period has expired, countdown,<br>countup, time display, clip and stand, instructions in 3 languages,<br>supplied with 1 battery AAA 1.5 VAC | 1            |

## Glass Viscometer

| Order No. | Type  | Qty per unit |
|-----------|---|--------------|
| 08.3009   | 100 ml with integrated nozzle Ø 2.8 mm, made of DURAN glass | 1            |

## Consistency and viscosity



### Consistometer Bostwick

To measure the consistency, viscosity and flow-out time of liquids by measuring the distance covered by the sample during a certain time.

Specifications:

- Application: Food industry
- Volume of sample: 75 ml
- Dimensions: 35 x 9 x 13 cm
- Material: Stainless steel
- Graduation: 0.5 cm

| Order No. | Type                   | Qty per unit |
|-----------|------------------------|--------------|
| 08.3012   | Consistometer Bostwick | 1            |



### Flow Viscometer

To rapidly compare measurements taken from inhomogeneous samples.

The principle is based on the measurement of capacitive change due to the conductivity of the sample. The measurement is made on a special cast into the measuring chamber contact point.

Specifications:

- Application: Food industry
- Dimensions: 11.5 x 5.7 x 32.5 cm
- Programmable measuring times: 7.5, 15 or 30 sec

| Order No. | Type                | Qty per unit |
|-----------|---------------------|--------------|
| 08.3013   | Viscometer Polyvisc | 1            |

## Effect of homogenization

### Effect of Homogenization

| Order No. | Type   | Qty per unit |
|-----------|--|--------------|
| 08.4000   | Homogenization tube, ring marks at 5 and 30 ml, with a stopper (08.40001), suitable for Gerber centrifuges | 1            |
| 08.40001  | Spare rubber stopper   | 1            |



08.4000

## Special examinations of milk- and other powders

### Determination of the Solubility Index



#### Centrifuge Tube Gerber for Solubility Test

Matching centrifuge: see on p. 22  
Matching universal rotor: 03.3300 (see on p. 23)  
Matching insert Gerber: 03.1630 (see on p. 23)

| Order No. | Type   | Qty per unit |
|-----------|--|--------------|
| 09.0010   | 0 to 50 ml graduated, Ø 24 x 190 mm, made of DURAN glass | 1            |

#### Centrifuge Tube ADPI for Solubility Test (former ADMI)

Matching centrifuge: see p. 22  
Matching universal rotor: 03.3300 (see on p. 23)  
Matching insert ADPI: 03.1631 (see on p. 23)

| Order No. | Type   | Qty per unit |
|-----------|--|--------------|
| 09.0011   | 0 to 20 to 50 ml graduated, Ø 30 x 135 mm, made of DURAN glass | 1            |

#### Accessories for Solubility Test

| Order No. | Type   | Qty per unit |
|-----------|--|--------------|
| 09.0020   | Siphon fitting for centrifuge tube Gerber, with suction tube and stopper | 1            |
| 09.0021   | Siphon fitting for centrifuge tube ADPI, with suction tube and stopper   | 1            |

#### Consumables for Solubility Test

| Order No.   | Type                     | Qty per unit |
|-------------|--------------------------|--------------|
| 60.1055-100 | Antifoaming agent, 100 g | 1            |
| 60.1055     | Antifoaming agent, 1 kg  | 1            |

## Special examinations of milk- and other powders

### Solumixer

To determine the solubility of various powders.  
Complies with the test specifications of ADPI and DLG.  
Stirring blades made of stainless steel.  
Complete with a blender glass.



09.0040

| Order No.      | Type  | Qty per unit |
|----------------|---|--------------|
| 09.0040-230CH  | Solumixer Universal 230 VAC/50 Hz with Swiss power plug digital display, one fixed program (3600 rpm, 90 sec) for solubility and variable programming for general use (1800-3600 rpm, timer 1 - 9 min)  | 1            |
| 09.0040-230CEE | Solumixer Universal 230 VAC/50 Hz with Schuko power plug digital display, one fixed program (3600 rpm, 90 sec) for solubility and variable programming for general use (1800-3600 rpm, timer 1 - 9 min) | 1            |
| 09.0040-115    | Solumixer Universal 115 VAC/60 Hz with US power plug digital display, one fixed program (3600 rpm, 90 sec) for solubility and variable programming for general use (1800-3600 rpm, timer 1 - 9 min)     | 1            |
| 09.0041-230    | Solumixer Standard 230 VAC/50 Hz, without digital display, with a fixed program (3600 rpm, 90 sec) for solubility   | 1            |
| 09.0041-115    | Solumixer Standard 115 VAC/60 Hz without digital display, with a fixed program (3600 rpm, 90 sec) for solubility  | 1            |

### Accessories for Solumixer

| Order No. | Type                | Qty per unit |
|-----------|---------------------|--------------|
| 09.0051   | Spare blender glass | 1            |
| 09.0052   | Spare stirrer blade | 1            |
| 09.0053   | Spare driving belt  | 1            |
| 09.0056   | Spare rocker arm    | 1            |

### Waring Mixer

Robust and efficient laboratory mixer for food samples.  
Blender glass: 1.0 liters  
Stand with knife block

Specifications:

Speed : 500 - 2000 rpm  
Power: 840 W  
Voltage : 230 VAC

| Order No. | Type  | Qty per unit |
|-----------|---|--------------|
| 35.0100   | Waring mixer LB 20 EG complete with blender glass | 1            |
| 35.0122   | Spare blender glass                               | 1            |

## Special examinations of milk- and other powders

### Purity Degree



#### Sieve for Test Filter

Included in the delivery:  
- 09.00602 Sieve with 1.0 mm mesh  
- 09.00601 Reduction piece

| Order No. | Type   | Qty per unit |
|-----------|--|--------------|
| 09.0060   | Sieve for test filters for reconstituted milk, Ø 100/92 mm | 1            |

#### Viewing Stand for Test Slides

| Order No. | Type  | Qty per unit |
|-----------|---|--------------|
| 09.0061   | Viewing stand for reconstituted milk dimensions (WxDxH): 300 x 50 x 80 mm | 1            |

#### Filtering Funnel for Milk Powder Samples

Made of stainless steel, funnel volume 500 ml.  
Following faucet creates a vacuum, thereby accelerating the filtration.

Included in the delivery:  
- 09.0103OZ Filtering funnel  
- 09.01030 Sieve Ø 28 mm  
- 09.01031 Joint to filtration funnel  
- Water jet pump  
- PVC hose Ø 10/14 mm  
(This filtering funnel is also suitable for soil samples, see on p. 57)



| Order No. | Type                      | Qty per unit |
|-----------|---------------------------|--------------|
| 09.0103   | Filtering funnel complete | 1            |

#### Accessories and Consumables for Purity Degree

| Order No. | Type   | Qty per unit |
|-----------|--|--------------|
| 09.01030  | Spare sieve for filtering funnel, Ø 28 mm  | 1            |
| 09.0100   | ADPI comparison chart for scorched particles   | 1            |
| 09.0110   | Sediment test filter cards for determination of scorched particles in milk powder acc. to ADPI | 500          |
| 09.0111   | Sediment test round filters Ø 32 mm, mass per unit area 110 g/m <sup>2</sup>                   | 1000         |

## Special examinations of milk- and other powders

### Determination of the Jolted Specific Weight

#### Jolting Volumeter STAV II

To determine of jolted volume according to ISO, ASTM and DIN standards.

Included in the delivery:

- Jolting volumeter STAV II
- Graduated measuring cylinder 250 ml, made of glass

| Order No.   | Type  | Qty per unit |
|-------------|---|--------------|
| 09.0200     | Jolting volumeter STAV II complete, 230 VAC/50 Hz | 1            |
| 09.0200-115 | Jolting volumeter STAV II complete, 115 VAC/60 Hz | 1            |



#### Accessories for STAV II

| Order No. | Type   | Qty per unit |
|-----------|--|--------------|
| 09.0201   | Spare glass cylinder 250 ml, length 330 mm                     | 1            |
| 09.0202   | Acrylic glass cover incl. frame for noise damping hood         | 1            |
| 09.0203   | Preselection counter   | 1            |
| 09.0210   | Noise damping hood KU H550 for measuring cylinder 10 to 250 ml | 1            |

#### Jolting Volumeter Gerber

To determine of specific weight of a jolted sample.  
Automatic apparatus with up to 100 strokes in 30 sec.

Included in the delivery:

- 09.0220 Jolting volumeter
- 09.02201 Cylinder, 500 ml, made of stainless steel
- Country-specific power cord

| Order No. | Type   | Qty per unit |
|-----------|--|--------------|
| 09.0220   | Jolting volumeter Gerber complete, 230 VAC/50 Hz | 1            |
| 09.0221   | Jolting volumeter Gerber complete, 115 VAC/60 Hz | 1            |



## Special examinations of milk- and other powders

### Determination of Miscibility and Clumping



#### Mixer for the Determination of Miscibility and Clumping

To mix powders and liquids.

3 fixed programs:

- Program 1: Speed 50 rpm, time 180 sec
- Program 2: Speed 60 rpm, time 30 sec
- Program 3: Speed 60 rpm, time 15 sec

1 variable program:

- Speed 40 to 80 rpm, time 15 to 300 sec

Specifications:

- Digital display
- Indicator when changing from fixed to variable program
- Low-noise revolve
- Power: 100 W
- Voltage: 230 VAC/50 Hz

| Order No. | Type   | Qty per unit |
|-----------|--|--------------|
| 09.0300   | Mixer with drum and holder without sample tube | 1            |

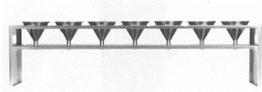


09.0301+09.0303

#### Accessories for Mixer for the Determination of Miscibility

| Order No. | Type   | Qty per unit |
|-----------|--|--------------|
| 09.0301   | Tripod for sample tube (09.0303), made of PVC          | 1            |
| 09.0302   | Funnel, made of stainless steel, Ø 120/36 x 185/110 mm | 1            |
| 09.0303   | Sample tube, Ø 52 x 245 mm, RN 45/40                   | 1            |
| 9.230145  | Stopper, hexagonal, RN 45/40, PE, without drillings    | 1            |

### Determination of Flowability of Powders



#### Flowability Funnels

| Order No. | Type   | Qty per unit |
|-----------|--|--------------|
| 09.0400   | Funnel battery made of stainless steel dimensions (WxDxH): 80 x 20 x 20 cm, with 7 funnels Ø 9 cm apertures Ø : 2.5, 3.0, 3.5, 4.0, 4.5 and 5.0 mm | 1            |

## Special examinations of milk- and other powders

### Determination of Wettability of Powders

#### Funnel Battery

For standard measurement of the time, that the powder needs, to absorb deionized water.

| Order No. | Type  | Qty per unit |
|-----------|---|--------------|
| 09.0450   | Funnel battery made of stainless steel<br>dimensions (WxDxH): 50 x 10 x 15.5/20 cm, with 4 funnels Ø 5 cm | 1            |
| 09.0451   | Powder dosing cup with scraper  | 1            |



### Determining the Angle of Repose of Powders and Granulates

#### Pourability Tester

| Order No. | Type   | Qty per unit |
|-----------|--|--------------|
| 09.0460   | Standard version according to DIN/ISO 4324<br>Included in the delivery:<br>- 09.0462 Pourability Tester<br>- 09.04600 Funnel with outlet Ø 10 mm<br>- 09.04601 Acrylic glass pane Ø 100 x 25 mm              | 1            |
| 09.0461   | Modified version for milk powders with high fat content<br>Included in the delivery:<br>- 09.0462 Pourability Tester<br>- 09.04610 Funnel with outlet Ø 12 mm<br>- 09.04611 Acrylic glass pane Ø 100 x 15 mm | 1            |



### Determination of Color

#### V-Samples Scraper

| Order No. | Type   | Qty per unit |
|-----------|--|--------------|
| 09.8135   | V-samples scraper, small model<br>Included in the delivery:<br>- 09.81350 V-samples scraper, small<br>- 09.8136 Sample cup black Ø 90 mm<br>- Laboratory dish (WxDxH) 310 x 370 x 75 mm  | 1            |
| 09.8138   | V-samples scraper, large model<br>Included in the delivery:<br>- 09.81380 V-samples scraper, large<br>- 09.8139 Sample cup black Ø 142 mm<br>- Laboratory dish (WxDxH) 310 x 370 x 75 mm | 1            |



## Physical examinations of whipped cream

### Whipped Cream Tester CT II

Measures the whipping time it takes the cream to produce its highest resistance and the corresponding maximum current consumption of the motor.

A cream sample is whipped under exactly defined conditions:

- Standardized cup for 100 ml cream
- Standardized whipping paddles
- Constant speed
- Temperature control 5 °C (by filling the cooling mantle with ice or using external cooling device).

As the stiffness of the cream increases when whipping, the resistance of the motor powering the paddles increases proportionally. Timing runs simultaneously. At the point of highest resistance the instrument stops automatically and blocks the reading of:

- Time of analysis in seconds
- Highest power consumption of the motor in mA
- Sample temperature

According to DLG and the Swiss manual for foods.

| Order No. | Type   | Qty per unit |
|-----------|--|--------------|
| 09.1000   | Whipped cream tester CT II incl. acrylic glass hood, 230 VAC/50 Hz | 1            |

### Accessories for CT II

| Order No. | Type   | Qty per unit |
|-----------|--|--------------|
| 09.100052 | Sample cups with cams  | 1            |
| 09.1010   | Cooling cup to CT II<br>to connection to external cooling device   | 1            |
| 09.2010   | Forming plate<br>to produce a 6 x 6 cm cream cube for testing decantation characteristics  | 1            |
| 09.2011   | Decantation sieve acc. to DIN<br>to determine the deposited amount of liquid, dimensions: 10 x 10 cm   | 1            |
| 09.2020   | Ruler for CT II<br>to measure the increase in volume of whipped cream in the sample cup<br>of the CT II, Scale 100 to 250 ml (0 to 150 % increase in volume) | 1            |

### Plunger FT I

Measures the time it takes a plunger of 30 g and an additional weight of 80 g to penetrate 3 cm into the whipped cream.

Included in the delivery:

- 09.12000 Stamp (stick and holder)
- 09.11002 Immersion stamp FT I
- 09.11004 Weight 80 g
- 09.100052 Sample cups with cams
- Tripod plate
- Tripod rod

Suitable stopwatches see on p. 69

| Order No. | Type                    | Qty per unit |
|-----------|-------------------------|--------------|
| 09.1200   | Mechanical plunger FT I | 1            |



### Cheese and Dairy Thermometer

Normal glass, opal glass scale, wide and good readable optima capillary, division: 1 °C.

| Order No. | Type  | Qty per unit |
|-----------|---|--------------|
| 10.0000   | Measuring range: 0 to +100 °C, blue mercury filling, Ø 23 x 350 mm                        | 1            |
| 10.0001   | Measuring range: 0 to +100 °C, blue mercury filling, Ø 23 x 350 mm, officially calibrated | 1            |
| 10.0002   | Measuring range: 0 to +100 °C, red alcohol filling, Ø 23 x 350 mm                         | 1            |
| 10.0003   | Measuring range: 0 to 80 °R, blue mercury filling, Ø 23 x 350 mm                          | 1            |

### Protection Cage for Thermometer

| Order No. | Type  | Qty per unit |
|-----------|---|--------------|
| 10.0010   | Made of stainless steel with loop for cheese and dairy thermometers | 1            |

### Polygard Thermometer

Precision dairy thermometer (with manufacturer's certificate) in protection cage.

The Polygard cage holds glass splinters and mercury residues in case of glass breaks. The hygienic, rustfree and shock-proof cage protects the thermometer at 100%, without affecting the good quality of a glass thermometer, such as fast display, precision and reliability.



| Order No. | Type                          | Qty per unit |
|-----------|-------------------------------|--------------|
| 10.0020G  | Measuring range: 0 to +100 °C | 1            |
| 10.0021G  | Measuring range: 0 to 80 °R   | 1            |

### Dairy Thermometer

| Order No. | Type   | Qty per unit |
|-----------|--|--------------|
| 10.0060   | Floating thermometer, -10 to 110 °C, alloy ballast, dimensions: approx. Ø 10 x 260 mm, paper scale | 1            |
| 10.0061   | Floating thermometer, 20 to 230 °F, alloy ballast, dimensions: approx. Ø 10 x 260 mm, paper scale  | 1            |

## Universal thermometers

### Chemical Thermometer

Enclosed scale type, with loop, Ø approx. 7-8 mm, prismatic measuring capillary, division: 1 °C.

| Order No. | Type  | Qty per unit |
|-----------|---|--------------|
| 10.1105   | Measuring range: -35 to +50 °C, red special filling, length: 200 mm   | 1            |
| 10.1110   | Measuring range: -10 to +100 °C, red special filling, length: 260 mm  | 1            |
| 10.1115   | Measuring range: -10 to +150 °C, red special filling, length: 260 mm  | 1            |
| 10.1125   | Measuring range: -10 to +250 °C, blue special filling, length: 300 mm | 1            |

### General Purpose Thermometer

Enclosed scale type, with loop, Ø approx. 7-8 mm, prismatic measuring capillary, luminous blue, mercury filling, division: 1 °C.

| Order No. | Type                            | Qty per unit |
|-----------|---------------------------------|--------------|
| 9.235303  | Measuring range: -35 to +50 °C  | 1            |
| 9.235305  | Measuring range: -10 to +50 °C  | 1            |
| 9.235310  | Measuring range: -10 to +100 °C | 1            |
| 9.235315  | Measuring range: -10 to +150 °C | 1            |
| 9.235320  | Measuring range: -10 to +200 °C | 1            |
| 9.235325  | Measuring range: -10 to +250 °C | 1            |
| 9.235336  | Measuring range: -10 to +360 °C | 1            |
| 9.235342  | Measuring range: -10 to +420 °C | 1            |

### Maximum Thermometer for Swinging

Enclosed scale type, Ø 7-8 mm, prismatic measuring capillary, luminous blue, mercury filled, division: 1 °C.

| Order No. | Type  | Qty per unit |
|-----------|---|--------------|
| 9.235910  | Measuring range: -10 to +100 °C, length: 260 mm | 1            |
| 9.235915  | Measuring range: -10 to +150 °C, length: 260 mm | 1            |
| 9.235925  | Measuring range: -10 to +250 °C, length: 300 mm | 1            |

### Laboratory Thermometer

Enclosed scale type, Ø approx. 8-9 mm, Richter seal with button

Mercury filling: Prismatic measuring capillary, luminous blue

Red filling: Uncoated capillary, total immersion

| Order No. | Type   | Qty per unit |
|-----------|--|--------------|
| 9.235405  | Measuring range: -5/0 to +50 °C: 0.5, mercury filling, length: 220 mm  | 1            |
| 9.235410  | Measuring range: -5/0 to +100 °C: 0.5, mercury filling, length: 270 mm | 1            |
| 9.235495  | Measuring range: -10/0 to +50 °C: 0.5, red filling, length: 220 mm     | 1            |
| 9.235496  | Measuring range: -10/0 to +100 °C: 0.5, red filling, length: 270 mm    | 1            |
| 6.077879  | Measuring range: -5/0 to +100 °C: 0.2, mercury filling, length: 420 mm | 1            |



9.235405

## Universal thermometers

### Pocket Thermometer

Enclosed scale type, with nickel-plated, double plug collar, approx. Ø 11.5 x 140 mm, with clip, prismatic measuring capillary, uncoated, division: 1 °C.

| Order No. | Type   | Qty per unit |
|-----------|--|--------------|
| 10.1205   | Measuring range: -40 to +50 °C, red filling                    | 1            |
| 10.1207   | Spare thermometer, measuring range: -40 to +50 °C, red filling | 1            |
| 10.1211   | Measuring range: -20 to +120 °C, mercury filling               | 1            |
| 10.1212   | Measuring range: -20 to +120 °C, blue filling                  | 1            |



Fig. similar

### Plastic Thermometer

Cardboard scale, blue alcohol filling, division: 1 °C.

| Order No. | Type                           | Qty per unit |
|-----------|--------------------------------|--------------|
| 10.1220   | Measuring range: -20 to +50 °C | 1            |
| 10.1221   | Measuring range: 0 to +70 °C   | 1            |



### Universal Thermometer

In hygienic plastic case resistant to heat and shocks, red filling, length: 280 mm.

| Order No. | Type   | Qty per unit |
|-----------|--|--------------|
| 10.1231   | Measuring range: -10 to +100 °C                    | 1            |
| 10.1233   | Spare thermometer, measuring range: -10 to +100 °C | 1            |



### Test Certificate for Thermometers

| Order No. | Type   | Qty per unit |
|-----------|--|--------------|
| 10.2000   | Test certificate Gerber Instruments for thermometers | 1            |

## Electronic thermometers



### Temp 7 - Portable Thermometer for NTC Probes

Ergonomic and rugged handheld instrument with additional protective casing, protection: IP 57, large display, NTC connection for temperature probe, 3 x 1.5 V batteries (AA).

**Functions:**

- Measuring range: -50 °C to +150 °C
- Division: 0.1 °C
- Accuracy: ± 0.2 °C
- Display of the MIN/MAX values
- Measurement stability indicator
- Memory
- Auto-Power-Off
- Display of battery level, error messages
- Certifiable by National Metrology Centre (EU)

**Included in the delivery:**

- Temperature meter
- With/without probe
- Carrying case

| Order No.   | Type   | Qty per unit |
|-------------|--|--------------|
| 30GI.501000 | Temp 7, electronic thermometer without probe               | 1            |
| 30GI.501010 | Temp 7, electronic thermometer with probe NT7L             | 1            |
| 30GI.501020 | Temp 7, electronic thermometer with penetration probe NT7P | 1            |

### Accessories and Consumables for Temp 7 NTC

| Order No.   | Type  | Qty per unit |
|-------------|---|--------------|
| 30GI.507010 | Temperature probe NT7L  | 1            |
| 30GI.507011 | Temperature penetration probe NT7P  | 1            |
| 30GI.509090 | Calibration certificate by an accredited laboratory, 3-point calibration 0 to +100 °C (according to customer specification) | 1            |
| 30GI.509095 | Test certificate Gerber Instruments for Temp 7 and Temp 70  | 1            |

## Temp 70 - Portable Thermometer for RTD Probes

Ergonomic and rugged handheld instrument with additional protective casing, protection: IP 57, large backlit display, RTD connection for temperature probe, 3 x 1.5 V batteries (AA).



### Functions:

- Measuring range: -99.99 °C to +99.99 °C, division 0.01 °C
- Measuring range: -200 °C to +999.9 °C, division 0.1 °C
- Accuracy:  $\pm 0.03$  °C
- Datalogger for 1000 temperature values, manual or automatic, interval 1 min to 99 h
- One point calibration (with date and time)
- Display of the MIN/MAX values
- Measurement stability indicator
- Stability criteria of measurement: low-med-high
- Date and time on display
- Memory
- Auto-Power-Off
- Display of battery level/error messages
- USB port for connection with computer
- Software for data transfer
- Certifiable by National Metrology Centre (EU)

### Included in the delivery:

- Temperature meter
- Software, power supply, USB cable
- Carrying case

| Order No.   | Type   | Qty per unit |
|-------------|--|--------------|
| 30GI.502000 | Temp 70, electronic thermometer without probe, with datalogger | 1            |

## Accessories and Consumables for Temp 70 RTD

| Order No.   | Type  | Qty per unit |
|-------------|---|--------------|
| 30GI.507020 | Temperature probe PT56L   | 1            |
| 30GI.507021 | Temperature penetration probe PT56P   | 1            |
| 30GI.509090 | Calibration certificate by an accredited laboratory, 3-point calibration 0 to +100 °C (according to customer specification) | 1            |
| 30GI.509095 | Test certificate Gerber Instruments for Temp 7 and Temp 70  | 1            |

**More probes on request**

## Thermohygrometers

### Polymeter

| Order No. | Type   | Qty per unit |
|-----------|--|--------------|
| 10.7118   | Precision thermometer and hygrometer<br>Instruments in metal housing with Ø 103 mm, for wall mounting<br>Measuring range:<br>- Rel. humidity: 0 to 100 %<br>- Temperature: -35 to +50 °C | 1            |



9.726964

### Thermohygrometer

| Order No. | Type   | Qty per unit |
|-----------|--|--------------|
| 9.726403  | Thermohygrometer, synthetic hair, case with brass hanging ring<br>Measuring range:<br>- Rel. humidity: 0 to 100 %<br>- Temperature: -15 to +55 °C  | 1            |
| 9.726964  | Thermohygrometer testo 608-H1, display of humidity/dew point and temperature as well as Max/Min values, incl. batteries  | 1            |
| 9.726405  | Thermohygrometer TA100, display of humidity/dew point and temperature as well as Max/Min values, incl. batteries and alarm function<br>Measuring range:<br>- Rel. humidity: 1 to 99 % ± 3-5 %<br>- Temperature: -40 to +70 °C ± 1 °C | 1            |

## Handbooks

| Order No. | Type   | Qty per unit |
|-----------|--|--------------|
| 11.1001   | Die praktische Milchprüfung und die Kontrolle von Molkereiprodukten<br>Instructions for the in practice often used analysis methods<br>K. Schneider/H. Roeder, 352 pages, 1979 edition, German | 1            |
| 11.1002   | Tratado Práctico de los Análisis de la leche<br>K. Schneider/M. Arroyo, 230 pages, 1994 edition, Spanish   | 1            |

## Alphabetical index

---

### A

|  |    |
|--|----|
| Accessories and Consumables for ColonyCount V                  | 52 |
| Accessories and Consumables for Purity Degree                  | 74 |
| Accessories and Consumables for Reduction Test                 | 56 |
| Accessories and Consumables for Temp 7 NTC                     | 82 |
| Accessories and Consumables for Temp 70 RTD                    | 83 |
| Accessories for Acidity Determination acc. to Peter            | 59 |
| Accessories for Acidity Determination acc. to Soxhlet-Henkel   | 58 |
| Accessories for Analytical Balances                            | 32 |
| Accessories for Centrifuge Gerber Universal                    | 23 |
| Accessories for Cryoscope C1 and C1A                           | 42 |
| Accessories for CT II  | 78 |
| Accessories for Flow Out Viscometer                            | 69 |
| Accessories for Mixer for the Determination of Miscibility     | 76 |
| Accessories for Moisture Analyzer BM 65                        | 31 |
| Accessories for Solubility Test                                | 72 |
| Accessories for Solumixer                                      | 73 |
| Accessories for STAV II  | 75 |
| Accessories for Tilt Measures Superior                         | 18 |
| Accessories for Waterbath Butytherm Mini                       | 19 |
| Accessories for Waterbath Eurotherm                            | 21 |
| Accessories for Waterbath Pot                                  | 19 |
| Accessories for Waterbath WB 22 Pump                           | 20 |
| Acidimeter Salut   | 58 |
| Acidity Determination according to Salut                       | 58 |
| Acidity Determination by Titration according to Dornic         | 60 |
| Acidity Determination by Titration according to Peter          | 59 |
| Acidity Determination by Titration according to Soxhlet-Henkel | 58 |
| Alcohol Hydrometer   | 37 |
| Alcohol Hydrometer Class II without Thermometer                | 38 |
| Alcohol Hydrometer without Thermometer                         | 37 |
| Aluminum Dishes  | 27 |
| Amyl Alcohol Pipette   | 17 |
| Analytical Balances  | 32 |
| Automatic Acidity Buret Dornic                                 | 60 |
| Automatic Acidity Buret Schilling                              | 59 |
| Automatic Acidity Buret Soxhlet-Henkel                         | 58 |
| Automatic Measures Permanent                                   | 18 |

### B

|  |    |
|--|----|
| Bacteriological Pipette                                      | 46 |
| Bottle Carriers for Laboratory Bottles                       | 6  |
| Bottle Carriers for Milk Sample Bottles                      | 5  |
| Butter Butyrometer with Accessories                          | 13 |
| Butter Butyrometer without Accessories                       | 13 |
| Butter Triers  | 6  |
| Butyrometer for Condensed Milk and Ice Cream Roeder w/ Acc.  | 11 |
| Butyrometer for Condensed Milk and Ice Cream Roeder w/o Acc. | 11 |
| Butyrometer Racks  | 15 |
| Butyrometer Reading Stand                                    | 15 |

**C**

|   |    |
|---|----|
| Cannulas with Luer Lock                                   | 5  |
| Centrifuge Gerber Micro II                                | 24 |
| Centrifuge Gerber Universal                               | 22 |
| Centrifuge Tube ADPI for Solubility Test (former ADMI)    | 72 |
| Centrifuge Tube Gerber for Solubility Test                | 72 |
| Centrifuge Tubes for Leucocytes Test                      | 55 |
| Cheese and Dairy Thermometer                              | 79 |
| Cheese Butyrometer according to BS and IS                 | 12 |
| Cheese Butyrometer Van Gulik with Accessories             | 12 |
| Cheese Butyrometer Van Gulik without Accessories          | 12 |
| Cheese Triers   | 6  |
| Chemical Thermometer                                      | 80 |
| Cleaning Brush for Butyrometer Body                       | 16 |
| Cleaning Brush for Butyrometer Scale                      | 16 |
| Colony Counter ColonyCount V                              | 51 |
| Comparison Table for Sediment Test                        | 57 |
| Cond 7 - Handheld Meters Set/Basic                        | 64 |
| Cond 70 - Handheld Meters Set/Advanced                    | 64 |
| Conductivity Tester - Cond 5 Set                          | 65 |
| Conical Rubber Stoppers                                   | 14 |
| Consistometer Bostwick                                    | 70 |
| Consumables for Centrifuge Gerber Micro II                | 24 |
| Consumables for Cond 7 and Cond 70                        | 65 |
| Consumables for Cryoscope Gerber Standard                 | 41 |
| Consumables for Cryoscope C1 and C1A                      | 43 |
| Consumables for PC 7 and PC 70                            | 67 |
| Consumables for pH 7 and pH 70                            | 63 |
| Consumables for pH Cheese Set                             | 61 |
| Consumables for Solubility Test                           | 72 |
| Cork Stoppers for Extraction Flasks                       | 26 |
| Cream and Ice Cream Butyrometer Koehler Gerber Standard   | 9  |
| Cream Butyrometer according to National Standards         | 11 |
| Cream Butyrometer Koehler according to National Standards | 9  |
| Cream Butyrometer Koehler Gerber Standard                 | 9  |
| Cream Butyrometer Roeder with Accessories                 | 10 |
| Cream Butyrometer Roeder without Accessories              | 10 |
| Cream Pipets  | 17 |
| Crucible Tongs  | 28 |
| Cryoscope C1  | 42 |
| Cryoscope Gerber Standard                                 | 41 |

**D**

|   |    |
|---|----|
| Dairy Thermometer   | 79 |
| Desiccant Beads   | 29 |
| Desiccator Plates   | 29 |
| Detection of Fat Deterioration (Method MTI)               | 68 |
| Determination of Color                                    | 77 |
| Determination of Flowability of Powders                   | 76 |
| Determination of Miscibility and Clumping                 | 76 |
| Determination of the Jolted Specific Weight               | 75 |
| Determination of the Solubility Index                     | 72 |
| Determination of Wettability of Powders                   | 77 |
| Determining the Angle of Repose of Powders and Granulates | 77 |

## Alphabetical index

---

### D

|   |    |
|---|----|
| Dilution Pipets                                   | 46 |
| Dosing Syringes Original Gerber                   | 4  |
| Drigalski Spatula                                 | 46 |
| Dry Milk Butyrometer Teichert with Accessories    | 13 |
| Dry Milk Butyrometer Teichert without Accessories | 13 |
| Durham Tubes                                      | 46 |

### E

|  |    |
|--|----|
| Effect of Homogenization                 | 71 |
| ERLENMEYERCAP and LABOCAP                | 48 |
| ERLENMEYERCAP without Handle             | 48 |
| Evaporating Dish Liebefeld               | 28 |
| Evaporating Dishes                       | 28 |
| Extraction Flasks acc. to Mojonnier      | 26 |
| Extraction Flasks acc. to Roese-Gottlieb | 26 |

### F

|  |    |
|--|----|
| Fat-Free Dry Matter (Butyra Test)        | 44 |
| Filter for Sediment Test                 | 57 |
| Filter Funnel for Sediment Test          | 57 |
| Filtering Funnel for Milk Powder Samples | 74 |
| Flow Out Viscometer                      | 69 |
| Flow Viscometer                          | 70 |
| Flowability Funnel                       | 76 |
| Funnel Battery                           | 77 |

### G

|  |    |
|--|----|
| General Accessories for Fat Extraction | 27 |
| General Accessories for Hydrometers    | 39 |
| General Purpose Thermometer            | 80 |
| Gerbal Stoppers                        | 14 |
| Glass Beaker                           | 14 |
| Glass Nail                             | 15 |
| Glass Viscometer                       | 69 |
| Glass Weighing Funnels                 | 15 |

### H

|   |    |
|---|----|
| Handbooks   | 85 |
| Hydrometer for Amyl Alcohol without Thermometer           | 36 |
| Hydrometer for Brine acc. to Baumé without Thermometer    | 37 |
| Hydrometer for Brine acc. to Bischoff without Thermometer | 37 |
| Hydrometer for Buttermilk Serum without Thermometer       | 35 |
| Hydrometer for Condensed Milk without Thermometer         | 35 |
| Hydrometer for Sulfuric Acid without Thermometer          | 36 |
| Hydrometer for Whey with Thermometer                      | 35 |
| Hydrometer for Yogurt and Cocoa with Thermometer          | 35 |
| Hydrometer Jars   | 39 |

|   |    |
|---|----|
| <b>I</b>  |    |
| Ice Cream Butyrometer APHA-SMEDP 13 SPEC                      | 11 |
| Ice Cream Butyrometer Koehler                                 | 10 |
| Incubators  | 53 |
| Inserts for Universal Rotor                                   | 23 |
| <b>J</b>  |    |
| Jolting Volumeter Gerber                                      | 75 |
| Jolting Volumeter STAV II                                     | 75 |
| <b>L</b>  |    |
| LABOCAP with Handle   | 48 |
| LABOCAP without Handle  | 49 |
| Laboratory Bottles  | 6  |
| Laboratory Thermometer  | 80 |
| Lactic Meter  | 40 |
| Lactodensimeter Gerber without Thermometer                    | 34 |
| Lactodensimeter Gerber without Thermometer with Density Scale | 33 |
| Lactodensimeter Quevenne without Thermometer                  | 34 |
| Ladle Scoop   | 4  |
| Loop Holder   | 45 |
| Loops according to Prof. Burri with Handle                    | 45 |
| Loops according to Prof. Burri without Handle                 | 45 |
| <b>M</b>  |    |
| Maximum Thermometer for Swinging                              | 80 |
| Milk Butyrometer  | 8  |
| Milk Butyrometer according to National Standards              | 8  |
| Milk Butyrometer Original Gerber                              | 7  |
| Milk Butyrometer Original Gerber Officially Calibrated        | 7  |
| Milk Dipper   | 4  |
| Milk Pipets   | 17 |
| Milk Powder Sampler   | 6  |
| Milk Sample Bottles   | 5  |
| Milk Stirrer  | 4  |
| Mixer for the Determination of Miscibility and Clumping       | 76 |
| Moisture Analyzer BM 65                                       | 31 |
| Mojonnier Analyzer Moplant                                    | 25 |
| More Equipment for Fat Extraction                             | 25 |
| Multi Purpose Cylinders for Hydrometers                       | 39 |
| Multiparameter Tester - PC 5 Set                              | 67 |
| <b>O</b>  |    |
| Ovens   | 30 |
| <b>P</b>  |    |
| PC 7 - pH/Cond Handheld Meters Set/Basic                      | 66 |
| PC 70 - pH/Cond Handheld Meters Set/Advanced                  | 66 |
| Pestle for Evaporating Dish Liebefeld                         | 28 |
| Petrifilm   | 53 |
| pH 7 - Handheld Meters Set/Basic                              | 62 |
| pH 70 - Handheld Meters Set/Advanced                          | 62 |
| pH Cheese Set   | 61 |

## Alphabetical index

---

### P

|   |    |
|---|----|
| pH Tester - pH 5 Set                              | 63 |
| pH Tester - pH 5 Set for Food                     | 63 |
| Phosphatase Test acc. to Aschaffenburg and Mullen | 54 |
| Phosphatase Test Lactognost                       | 54 |
| Plastic Thermometer                               | 81 |
| Platinum Loop                                     | 45 |
| Platinum Wire                                     | 45 |
| Plunger FT I                                      | 78 |
| Pocket Thermometer                                | 81 |
| Polygard Thermometer                              | 79 |
| Polymer   | 84 |
| Pourability Tester                                | 77 |
| Precision Hydrometer without Thermometer          | 38 |
| Precision Milk Butyrometer                        | 7  |
| Protection Cage for Thermometer                   | 79 |
| Purity Degree                                     | 74 |

### Q

|             |    |
|-------------|----|
| Quartz Sand | 29 |
|-------------|----|

### R

|   |    |
|---|----|
| Rack for 4 Weighing Pipets                  | 27 |
| Rack for Mojonnier Flasks                   | 26 |
| Racks for Reduction Test Tubes              | 56 |
| Reduction Test                              | 56 |
| Regulating Pins for Gerbal Stoppers         | 14 |
| Remarks to Lactodensimeters and Hydrometers | 39 |

### S

|  |    |
|--|----|
| Safety Eyeshield                               | 16 |
| Sample Dishes                                  | 32 |
| Schalm Test Paddle                             | 55 |
| Schalm Test Solution                           | 55 |
| Sea Sand                                       | 29 |
| Seal Foil Parafilm M                           | 47 |
| Sediment Test Pump                             | 57 |
| Sediment Tester Gerber                         | 57 |
| Sediment Tester Rapido                         | 57 |
| Self Filling Syringes Dosys                    | 46 |
| Shaking Cover                                  | 15 |
| Shaking Machine Rototube                       | 25 |
| Sieve for Test Filter                          | 74 |
| Siphon Fitting to Roese-Gottlieb Flasks        | 26 |
| Skim Milk Butyrometer with Accessories         | 8  |
| Skim Milk Butyrometer without Accessories      | 9  |
| Solumixer                                      | 73 |
| Spare Glass Cylinders for Dosing Syringes      | 5  |
| Special Hydrometer with Thermometer            | 36 |
| Special Hydrometer without Thermometer         | 36 |
| Special Rotor for Centrifuge Gerber Universal  | 23 |
| Specifically Required Equipment for Method MTI | 68 |
| Spoon Spatulas                                 | 32 |

**S**

|  |    |
|--|----|
| Strip Cup                                      | 55 |
| Sulfuric Acid Pipets                           | 17 |
| Support for Permanent Automat 1 ml Single      | 18 |
| Support for Permanent Automat 10 ml Single     | 18 |
| Support for Permanent Automat Double           | 18 |
| Suspended Glass Cylinder (Cardanic Suspension) | 39 |
| Swabs  | 46 |

**T**

|   |    |
|---|----|
| Temp 7 - Portable Thermometer for NTC Probes              | 82 |
| Temp 70 - Portable Thermometer for RTD Probes             | 83 |
| Test Certificate for Butyrometers                         | 13 |
| Test Certificate for Hydrometers                          | 39 |
| Test Certificate for Thermometers                         | 81 |
| Test Strips MERCKOQUANT                                   | 47 |
| Test Strips QUANTOFIX                                     | 47 |
| Test Tubes for Reduction Test                             | 56 |
| Thermohygrometer  | 84 |
| Thermolactodensimeter Gerber large Model with Thermometer | 33 |
| Thermolactodensimeter Gerber small Model with Thermometer | 34 |
| Thermolactodensimeter Quevenne with Thermometer           | 34 |
| Thermometer for Lactodensimeter Gerber                    | 33 |
| Tilt Measures Superior                                    | 18 |
| Total Solids Calculator Ackermann                         | 28 |
| Tweezers  | 32 |

**U**

|   |    |
|---|----|
| Universal Rotor for Centrifuge Gerber Universal | 23 |
| Universal Thermometer                           | 81 |

**V**

|                               |    |
|-------------------------------|----|
| Vacuum Desiccators            | 29 |
| Viewing Stand for Test Slides | 74 |
| V-Samples Scraper             | 77 |

**W**

|                              |    |
|------------------------------|----|
| Waring Mixer                 | 73 |
| Water Distribution in Butter | 44 |
| Water Pipette                | 17 |
| Waterbath Butytherm Mini     | 19 |
| Waterbath Eurotherm          | 21 |
| Waterbath Pot                | 19 |
| Waterbath WB 22 Pump         | 20 |
| Weighing Dishes              | 32 |
| Weighing Pipets              | 27 |
| Whipped Cream Tester CT II   | 78 |
| Whiteside Test               | 55 |

**Index by order numbers**

|          |   |          |    |          |    |
|----------|---|----------|----|----------|----|
| 02.0000  | 4 | 03.0107  | 8  | 03.0450  | 11 |
| 02.0001  | 4 | 03.0108  | 8  | 03.0451  | 11 |
| 02.0002  | 4 | 03.0109  | 8  | 03.0452  | 11 |
| 02.0003  | 4 | 03.0110  | 8  | 03.0453  | 11 |
| 02.0004  | 4 | 03.0114  | 8  | 03.0520  | 12 |
| 02.0005  | 4 | 03.0200  | 7  | 03.05200 | 12 |
| 02.0006  | 4 | 03.0211  | 9  | 03.0540  | 12 |
| 02.0007  | 4 | 03.0221  | 9  | 03.05400 | 12 |
| 02.0008  | 4 | 03.0230  | 8  | 03.0541  | 12 |
| 02.1010  | 4 | 03.02300 | 9  | 03.05410 | 12 |
| 02.1011  | 4 | 03.0231  | 8  | 03.0542  | 12 |
| 02.1057  | 5 | 03.02310 | 9  | 03.05420 | 12 |
| 02.1058  | 5 | 03.0303  | 9  | 03.0543  | 12 |
| 02.1059  | 5 | 03.0304  | 9  | 03.05430 | 12 |
| 02.1060  | 5 | 03.0305  | 9  | 03.0551  | 12 |
| 02.11002 | 5 | 03.0306  | 9  | 03.0552  | 12 |
| 02.11004 | 5 | 03.0307  | 9  | 03.0610  | 13 |
| 02.11005 | 5 | 03.0308  | 9  | 03.06100 | 13 |
| 02.11006 | 5 | 03.0309  | 9  | 03.0611  | 13 |
| 02.1110  | 5 | 03.0314  | 9  | 03.06110 | 13 |
| 02.1200  | 6 | 03.0315  | 9  | 03.0620  | 13 |
| 02.1201  | 6 | 03.0317  | 9  | 03.06200 | 13 |
| 02.1202  | 6 | 03.0318  | 9  | 03.0735  | 13 |
| 02.1203  | 6 | 03.0319  | 9  | 03.07350 | 13 |
| 02.1204  | 6 | 03.0326  | 9  | 03.0770  | 13 |
| 02.1210  | 6 | 03.0327  | 9  | 03.07700 | 13 |
| 02.1211  | 6 | 03.0331  | 10 | 03.0900  | 14 |
| 02.1215  | 6 | 03.0332  | 10 | 03.0902  | 14 |
| 03.0001  | 7 | 03.0333  | 10 | 03.0905  | 14 |
| 03.0009  | 7 | 03.0400  | 13 | 03.0906  | 14 |
| 03.0010  | 7 | 03.0403  | 10 | 03.0910  | 14 |
| 03.0012  | 7 | 03.04030 | 10 | 03.0915  | 14 |
| 03.0014  | 7 | 03.0404  | 10 | 03.0920  | 14 |
| 03.0016  | 7 | 03.04040 | 10 | 03.0925  | 14 |
| 03.0020  | 7 | 03.0410  | 10 | 03.0926  | 14 |
| 03.0025  | 7 | 03.04100 | 10 | 03.0930  | 14 |
| 03.0029  | 7 | 03.0411  | 10 | 03.0931  | 14 |
| 03.0030  | 7 | 03.04110 | 10 | 03.0932  | 14 |
| 03.0031  | 7 | 03.0412  | 10 | 03.0933  | 15 |
| 03.0032  | 7 | 03.04120 | 10 | 03.0935  | 15 |
| 03.0033  | 7 | 03.0414  | 10 | 03.0936  | 15 |
| 03.0043  | 7 | 03.04140 | 10 | 03.1000  | 17 |
| 03.0059  | 7 | 03.0415  | 10 | 03.1001  | 17 |
| 03.0060  | 7 | 03.04150 | 10 | 03.1002  | 17 |
| 03.0061  | 7 | 03.0416  | 10 | 03.1003  | 17 |
| 03.0062  | 7 | 03.04160 | 10 | 03.1004  | 17 |
| 03.0070  | 7 | 03.0417  | 10 | 03.1005  | 17 |
| 03.0071  | 7 | 03.04170 | 10 | 03.1006  | 17 |
| 03.0072  | 7 | 03.0418  | 10 | 03.1007  | 17 |
| 03.0080  | 8 | 03.04180 | 10 | 03.1008  | 17 |
| 03.0081  | 8 | 03.0420  | 10 | 03.1010  | 17 |
| 03.0082  | 8 | 03.04200 | 10 | 03.1020  | 17 |
| 03.0083  | 8 | 03.0430  | 11 | 03.1021  | 17 |
| 03.0084  | 8 | 03.04300 | 11 | 03.1022  | 17 |
| 03.0086  | 8 | 03.0431  | 11 | 03.1030  | 17 |
| 03.0087  | 8 | 03.04310 | 11 | 03.1040  | 17 |
| 03.0088  | 8 | 03.0432  | 11 | 03.1041  | 17 |
| 03.0089  | 8 | 03.04320 | 11 | 03.1042  | 17 |
| 03.0090  | 8 | 03.0440  | 11 | 03.1043  | 17 |
| 03.0105  | 8 | 03.0441  | 11 | 03.1050  | 17 |
| 03.0106  | 8 | 03.0442  | 11 | 03.11002 | 18 |

Index by order numbers

|             |    |            |    |          |    |
|-------------|----|------------|----|----------|----|
| 03.1111     | 18 | 03.9202    | 21 | 05.1021  | 34 |
| 03.1112     | 18 | 03.9203    | 21 | 05.1022  | 34 |
| 03.1201     | 18 | 03.9204    | 21 | 05.1025  | 34 |
| 03.1202     | 18 | 03.9205    | 21 | 05.1026  | 34 |
| 03.1230-1   | 18 | 03.9206    | 21 | 05.1030  | 35 |
| 03.1230-10  | 18 | 03.9207    | 21 | 05.1031  | 35 |
| 03.1231     | 18 | 03.9208    | 21 | 05.1032  | 35 |
| 03.13000    | 4  | 03.9210    | 21 | 05.1033  | 35 |
| 03.1350     | 4  | 03.9211    | 21 | 05.1034  | 35 |
| 03.1351     | 4  | 03.9213    | 21 | 05.1035  | 36 |
| 03.1352     | 4  | 03.9214    | 21 | 05.1037  | 36 |
| 03.1353     | 4  | 03.9500    | 15 | 05.1038  | 36 |
| 03.1354     | 4  | 03.9501    | 15 | 05.1039  | 36 |
| 03.1355     | 4  | 04.3000    | 26 | 05.1040  | 36 |
| 03.1360     | 5  | 04.30000   | 26 | 05.1041  | 36 |
| 03.1361     | 5  | 04.30000-1 | 26 | 05.1042  | 36 |
| 03.1362     | 5  | 04.30001   | 26 | 05.1043  | 36 |
| 03.1363     | 5  | 04.30001-1 | 26 | 05.1045  | 36 |
| 03.1364     | 5  | 04.3001    | 26 | 05.1048  | 36 |
| 03.1365     | 5  | 04.3002    | 26 | 05.1049  | 36 |
| 03.1500     | 15 | 04.30020   | 26 | 05.1151  | 37 |
| 03.1500     | 19 | 04.3003    | 26 | 05.1153  | 37 |
| 03.1521     | 15 | 04.3004    | 26 | 05.1160  | 36 |
| 03.1521     | 19 | 04.3005    | 26 | 05.1161  | 36 |
| 03.1550     | 15 | 04.3006    | 26 | 05.1165  | 36 |
| 03.1560     | 15 | 04.3007    | 26 | 05.11650 | 37 |
| 03.16269-12 | 24 | 04.3020    | 27 | 05.1166  | 37 |
| 03.16269-8  | 24 | 04.3021    | 27 | 05.1167  | 37 |
| 03.1630     | 23 | 04.3022    | 27 | 05.1168  | 37 |
| 03.1631     | 23 | 04.3025    | 27 | 05.1169  | 37 |
| 03.1632     | 23 | 04.3030    | 27 | 05.1170  | 37 |
| 03.1632     | 25 | 04.3031    | 27 | 05.1171  | 37 |
| 03.163201   | 25 | 04.3100    | 25 | 05.1172  | 37 |
| 03.1633     | 23 | 04.3221    | 25 | 05.1173  | 37 |
| 03.2250     | 24 | 04.3231    | 25 | 05.1176  | 38 |
| 03.2251     | 24 | 05.0000    | 28 | 05.1177  | 38 |
| 03.2260     | 24 | 05.0005    | 28 | 05.1178  | 38 |
| 03.2261     | 24 | 05.0006    | 28 | 05.1179  | 38 |
| 03.2270     | 24 | 05.0007    | 28 | 05.1184  | 38 |
| 03.2271     | 24 | 05.0009    | 28 | 05.1185  | 38 |
| 03.3110-12  | 22 | 05.0010    | 28 | 05.1186  | 38 |
| 03.3110-12  | 25 | 05.0011    | 28 | 05.1187  | 38 |
| 03.3110-36  | 22 | 05.0020    | 28 | 05.1188  | 38 |
| 03.3111-12  | 22 | 05.0021    | 28 | 05.1189  | 38 |
| 03.3111-12  | 25 | 05.0022    | 28 | 05.1191  | 38 |
| 03.3111-36  | 22 | 05.0030    | 29 | 05.1192  | 38 |
| 03.3112-12  | 22 | 05.0031    | 29 | 05.1193  | 38 |
| 03.3112-12  | 68 | 05.0032    | 29 | 05.1194  | 38 |
| 03.3112-36  | 22 | 05.0050    | 28 | 05.1205  | 39 |
| 03.3113-12  | 22 | 05.1000    | 33 | 05.12051 | 39 |
| 03.3113-12  | 68 | 05.1001    | 33 | 05.12053 | 39 |
| 03.3113-36  | 22 | 05.1002    | 33 | 05.1517  | 34 |
| 03.3300     | 23 | 05.1003    | 33 | 05.1518  | 34 |
| 03.3340     | 23 | 05.1004    | 39 | 05.2000  | 40 |
| 03.3341     | 23 | 05.1007    | 33 | 05.2100  | 41 |
| 03.9031     | 19 | 05.1008    | 33 | 05.2201  | 41 |
| 03.9034     | 19 | 05.1010    | 34 | 05.2202  | 41 |
| 03.9100     | 19 | 05.1011    | 34 | 05.2203  | 41 |
| 03.9101     | 19 | 05.1012    | 34 | 05.25095 | 42 |
| 03.9105     | 19 | 05.1013    | 34 | 05.25500 | 42 |
| 03.9201     | 21 | 05.1020    | 34 | 05.25501 | 42 |

**Index by order numbers**

|           |    |                |    |               |    |
|-----------|----|----------------|----|---------------|----|
| 05.25502  | 42 | 06.3000        | 56 | 09.0040-230CH | 73 |
| 05.25503  | 42 | 06.3000        | 59 | 09.0041-115   | 73 |
| 05.25504  | 42 | 06.3001        | 56 | 09.0041-230   | 73 |
| 05.25505  | 43 | 06.3001        | 59 | 09.0051       | 73 |
| 05.5020   | 43 | 06.3002        | 56 | 09.0052       | 73 |
| 05.5021   | 43 | 06.3003        | 56 | 09.0053       | 73 |
| 05.5022   | 43 | 06.3005        | 56 | 09.0056       | 73 |
| 05.5024   | 43 | 06.3005        | 58 | 09.0060       | 74 |
| 05.5025   | 43 | 06.3011        | 56 | 09.0061       | 74 |
| 05.5026   | 43 | 06.3013        | 56 | 09.0100       | 74 |
| 05.5027   | 43 | 06.3015        | 56 | 09.0103       | 74 |
| 05.5028   | 43 | 06.3016        | 56 | 09.01030      | 74 |
| 05.5030   | 42 | 06.3020        | 56 | 09.0110       | 74 |
| 05.6100   | 44 | 06.3022        | 56 | 09.0111       | 74 |
| 05.6101   | 44 | 06.3033        | 56 | 09.0200       | 75 |
| 06.0000   | 45 | 06.8000        | 57 | 09.0200-115   | 75 |
| 06.0001   | 45 | 06.8010        | 57 | 09.0201       | 75 |
| 06.0002   | 45 | 06.8015        | 57 | 09.0202       | 75 |
| 06.0003   | 45 | 06.8030        | 57 | 09.0203       | 75 |
| 06.0004   | 45 | 06.8040        | 57 | 09.0210       | 75 |
| 06.0005   | 45 | 06.8040-115    | 57 | 09.0220       | 75 |
| 06.0006   | 45 | 06.8050        | 57 | 09.0221       | 75 |
| 06.0007   | 45 | 06.8052        | 57 | 09.0300       | 76 |
| 06.0010   | 45 | 06.8052S       | 57 | 09.0301       | 76 |
| 06.0011   | 45 | 06.8060        | 57 | 09.0302       | 76 |
| 06.0012   | 45 | 07.0010        | 58 | 09.0303       | 76 |
| 06.0013   | 45 | 07.0011        | 58 | 09.0450       | 77 |
| 06.0021   | 45 | 07.0030        | 58 | 09.0451       | 77 |
| 06.0100   | 46 | 07.0100        | 58 | 09.0460       | 77 |
| 06.0101   | 46 | 07.0101        | 58 | 09.0461       | 77 |
| 06.0102   | 46 | 07.0110        | 58 | 09.1000       | 78 |
| 06.0105   | 46 | 07.0111        | 58 | 09.100052     | 78 |
| 06.0130   | 46 | 07.0120        | 58 | 09.1010       | 78 |
| 06.1300   | 51 | 07.0130        | 59 | 09.1200       | 78 |
| 06.130003 | 52 | 07.0131        | 59 | 09.2010       | 78 |
| 06.130004 | 52 | 07.0132        | 59 | 09.2011       | 78 |
| 06.1303   | 52 | 07.0133        | 59 | 09.2020       | 78 |
| 06.1307   | 52 | 07.0150        | 60 | 09.4000       | 76 |
| 06.1308   | 52 | 07.01500       | 60 | 09.8135       | 77 |
| 06.1309   | 52 | 07.0151        | 60 | 09.8138       | 77 |
| 06.1313   | 52 | 07.01510       | 60 | 10.0000       | 79 |
| 06.1399   | 52 | 08.2000        | 68 | 10.0001       | 79 |
| 06.140009 | 52 | 08.2010        | 68 | 10.0002       | 79 |
| 06.140019 | 52 | 08.3000        | 69 | 10.0003       | 79 |
| 06.140024 | 52 | 08.3002        | 69 | 10.0010       | 79 |
| 06.1410   | 52 | 08.3003        | 69 | 10.0020G      | 79 |
| 06.1411   | 52 | 08.3004        | 69 | 10.0021G      | 79 |
| 06.1920   | 53 | 08.3005        | 69 | 10.0060       | 79 |
| 06.1921   | 53 | 08.3006        | 69 | 10.0061       | 79 |
| 06.1922   | 53 | 08.3008        | 69 | 10.1000       | 41 |
| 06.1923   | 53 | 08.3009        | 69 | 10.1010       | 19 |
| 06.1924   | 53 | 08.3012        | 70 | 10.1105       | 80 |
| 06.1926   | 53 | 08.3013        | 70 | 10.1110       | 80 |
| 06.2010   | 54 | 08.4000        | 71 | 10.1115       | 80 |
| 06.2033   | 54 | 08.40001       | 71 | 10.1125       | 80 |
| 06.2050   | 55 | 09.0010        | 72 | 10.1205       | 81 |
| 06.2051   | 55 | 09.0011        | 72 | 10.1207       | 81 |
| 06.2052   | 55 | 09.0020        | 72 | 10.1211       | 81 |
| 06.2060   | 55 | 09.0021        | 72 | 10.1212       | 81 |
| 06.2061   | 55 | 09.0040-115    | 73 | 10.1220       | 81 |
| 06.2070   | 55 | 09.0040-230CEE | 73 | 10.1221       | 81 |

## Index by order numbers

|             |    |             |    |              |    |
|-------------|----|-------------|----|--------------|----|
| 10.1231     | 81 | 30GI.107030 | 63 | 35.0122      | 73 |
| 10.1233     | 81 | 30GI.107030 | 67 | 42.0290      | 32 |
| 10.2000     | 81 | 30GI.107040 | 63 | 50.108800    | 61 |
| 10.7118     | 84 | 30GI.108010 | 63 | 50.108802    | 61 |
| 11.1001     | 85 | 30GI.108010 | 67 | 50.108804    | 61 |
| 11.1002     | 85 | 30GI.108015 | 63 | 50.1200      | 61 |
| 20.0009     | 58 | 30GI.108015 | 67 | 50.1510      | 61 |
| 20.0804     | 59 | 30GI.108020 | 63 | 50.250113    | 52 |
| 20.0805     | 59 | 30GI.108020 | 67 | 50.pH3110-KE | 61 |
| 21.2702     | 18 | 30GI.108025 | 63 | 6.072147     | 54 |
| 23.0710     | 59 | 30GI.108025 | 67 | 6.075938     | 46 |
| 23.0711     | 59 | 30GI.108030 | 63 | 6.077879     | 80 |
| 23.0713     | 59 | 30GI.108030 | 67 | 6.200767     | 38 |
| 23.0714     | 59 | 30GI.108035 | 63 | 6.205165     | 46 |
| 23.0721     | 58 | 30GI.108035 | 67 | 6.205225     | 32 |
| 23.0722     | 58 | 30GI.201010 | 64 | 6.227043     | 38 |
| 23.0723     | 58 | 30GI.201020 | 64 | 6.227045     | 38 |
| 23.0724     | 58 | 30GI.202010 | 64 | 6.227046     | 38 |
| 23.1020     | 6  | 30GI.202020 | 64 | 6.227047     | 38 |
| 23.21042    | 48 | 30GI.203050 | 65 | 6.228414     | 38 |
| 23.21043    | 48 | 30GI.203060 | 65 | 6.231928     | 38 |
| 23.21210    | 49 | 30GI.207020 | 65 | 6.235043     | 42 |
| 23.21212    | 49 | 30GI.207020 | 67 | 6.236854     | 31 |
| 23.21213    | 49 | 30GI.207030 | 65 | 6.250170     | 33 |
| 23.21214    | 49 | 30GI.207030 | 67 | 6.250252     | 38 |
| 23.21215    | 49 | 30GI.208010 | 65 | 6.250253     | 38 |
| 23.21216    | 49 | 30GI.208010 | 67 | 6.250254     | 38 |
| 23.21217    | 49 | 30GI.208020 | 65 | 6.253649     | 16 |
| 23.21218    | 49 | 30GI.208020 | 67 | 6.258006     | 42 |
| 23.21219    | 50 | 30GI.208030 | 65 | 6.262604     | 46 |
| 23.21220    | 50 | 30GI.208030 | 67 | 6.267160     | 29 |
| 23.21221    | 50 | 30GI.401020 | 66 | 6.267161     | 29 |
| 23.21222    | 50 | 30GI.402020 | 66 | 60.1055      | 72 |
| 23.21223    | 50 | 30GI.403050 | 67 | 60.1055-100  | 72 |
| 23.21224    | 50 | 30GI.403060 | 67 | 7.072177     | 54 |
| 23.21225    | 50 | 30GI.501000 | 82 | 7.075920     | 44 |
| 23.21226    | 50 | 30GI.501010 | 82 | 7.672290     | 19 |
| 23.21227    | 50 | 30GI.501020 | 82 | 74.6906940   | 31 |
| 23.21228    | 50 | 30GI.502000 | 83 | 9.004301     | 37 |
| 23.21229    | 50 | 30GI.507010 | 82 | 9.004302     | 37 |
| 23.21230    | 50 | 30GI.507011 | 82 | 9.004900     | 39 |
| 23.21231    | 48 | 30GI.507020 | 83 | 9.042009     | 29 |
| 23.21232    | 48 | 30GI.507021 | 83 | 9.042119     | 29 |
| 23.21233    | 48 | 30GI.509090 | 82 | 9.042131     | 29 |
| 23.21234    | 48 | 30GI.509090 | 83 | 9.042138     | 29 |
| 24.2104     | 5  | 30GI.509095 | 82 | 9.042143     | 29 |
| 25.0001     | 16 | 30GI.509095 | 83 | 9.042147     | 29 |
| 25.0002     | 16 | 30GI.601010 | 30 | 9.042514     | 29 |
| 25.6030     | 52 | 30GI.601020 | 30 | 9.042519     | 29 |
| 30GI.101020 | 62 | 30GI.602010 | 30 | 9.042523     | 29 |
| 30GI.101030 | 62 | 30GI.602020 | 30 | 9.042528     | 29 |
| 30GI.101040 | 62 | 30GI.603010 | 53 | 9.042543     | 29 |
| 30GI.102020 | 62 | 30GI.603020 | 53 | 9.042544     | 29 |
| 30GI.102030 | 62 | 30GI.701030 | 20 | 9.072000     | 6  |
| 30GI.102040 | 62 | 30GI.701096 | 20 | 9.072001     | 6  |
| 30GI.103050 | 63 | 30GI.701097 | 20 | 9.072002     | 6  |
| 30GI.103051 | 63 | 30GI.701098 | 20 | 9.072005     | 6  |
| 30GI.103060 | 63 | 30PI.AAC70  | 31 | 9.072007     | 6  |
| 30GI.103061 | 63 | 30PI.BM-65  | 31 | 9.072019     | 6  |
| 30GI.107020 | 63 | 33.1200     | 19 | 9.102206     | 6  |
| 30GI.107020 | 67 | 35.0100     | 73 | 9.102216     | 6  |

**Index by order numbers**

---

|          |    |          |    |
|----------|----|----------|----|
| 9.129934 | 47 | 9.231446 | 50 |
| 9.130411 | 47 | 9.231447 | 50 |
| 9.130426 | 47 | 9.231448 | 50 |
| 9.130427 | 47 | 9.231449 | 50 |
| 9.150315 | 32 | 9.231456 | 48 |
| 9.150318 | 32 | 9.231457 | 48 |
| 9.150665 | 4  | 9.231458 | 48 |
| 9.150685 | 4  | 9.231460 | 49 |
| 9.150700 | 4  | 9.231461 | 49 |
| 9.160020 | 45 | 9.231462 | 49 |
| 9.170002 | 47 | 9.231463 | 49 |
| 9.170003 | 47 | 9.231464 | 49 |
| 9.170005 | 47 | 9.231465 | 49 |
| 9.171311 | 32 | 9.231466 | 49 |
| 9.171313 | 32 | 9.235303 | 80 |
| 9.190200 | 46 | 9.235305 | 80 |
| 9.230145 | 76 | 9.235310 | 80 |
| 9.231326 | 48 | 9.235315 | 80 |
| 9.231327 | 48 | 9.235320 | 80 |
| 9.231328 | 48 | 9.235325 | 80 |
| 9.231329 | 48 | 9.235336 | 80 |
| 9.231330 | 48 | 9.235342 | 80 |
| 9.231331 | 48 | 9.235405 | 80 |
| 9.231332 | 48 | 9.235410 | 80 |
| 9.231333 | 48 | 9.235495 | 80 |
| 9.231334 | 49 | 9.235496 | 80 |
| 9.231335 | 49 | 9.235910 | 80 |
| 9.231336 | 49 | 9.235915 | 80 |
| 9.231337 | 49 | 9.235925 | 80 |
| 9.231338 | 49 | 9.260189 | 69 |
| 9.231339 | 50 | 9.262410 | 69 |
| 9.231340 | 50 | 9.310122 | 28 |
| 9.231341 | 50 | 9.310125 | 28 |
| 9.231342 | 50 | 9.310130 | 28 |
| 9.231345 | 48 | 9.318052 | 39 |
| 9.231347 | 48 | 9.318053 | 39 |
| 9.231369 | 49 | 9.318068 | 39 |
| 9.231372 | 49 | 9.404001 | 46 |
| 9.231374 | 49 | 9.411449 | 43 |
| 9.231375 | 49 | 9.411501 | 43 |
| 9.231377 | 49 | 9.411521 | 46 |
| 9.231379 | 50 | 9.411527 | 46 |
| 9.231381 | 50 | 9.726403 | 84 |
| 9.231385 | 50 | 9.726405 | 84 |
| 9.231388 | 50 | 9.726964 | 84 |
| 9.231403 | 48 | 9.901452 | 32 |
| 9.231413 | 48 | 9.901453 | 32 |
| 9.231421 | 49 | 9.947150 | 54 |
| 9.231422 | 49 |          |    |
| 9.231423 | 49 |          |    |
| 9.231424 | 49 |          |    |
| 9.231425 | 49 |          |    |
| 9.231426 | 50 |          |    |
| 9.231427 | 50 |          |    |
| 9.231428 | 50 |          |    |
| 9.231429 | 50 |          |    |
| 9.231441 | 49 |          |    |
| 9.231442 | 49 |          |    |
| 9.231443 | 49 |          |    |
| 9.231444 | 49 |          |    |
| 9.231445 | 49 |          |    |