



### C 6000 isoperibol Package 1/10

The C 6000 isoperibol oxygen bomb calorimeter combines modern technology, variability and automation (isoperibol and dynamic modes) in one instrument. It operates according to all bomb calorimeter standards, such as e.g. the DIN, ISO, ASTM, GOST and GB. The operator can choose between three different starting temperatures (22 °C, 25 °C, 30 °C) in each measuring mode: isoperibol or dynamic. Due to the spherically shaped decomposition vessel head, the wall thickness was able to be reduced, allowing for faster heat transfer, which results in a shorter time measurement. Due to the variety of different interfaces (PC, Ethernet, SD-card, balance, printer) this unit is easily adaptable depending on the customer's specific application needs. Further adaption to data management and LIMS is possible with our calorimeter software C 6040 Calwin (Accessory).

- Automatic ignition
- Automatic water filling and draining
- Automatic oxygen filling, venting and flushing
- RFID technology for automatic decomposition vessel identification
- New design of the decomposition vessel allows for easier and faster preparation
- Can be operated with a chiller
- Easy and convenient touch screen operation
- Control chart view and correction calculation of globally used standards
- Ethernet interface for data management via FTP server or connection of a network printer
- Removable SD-card allows for easier data measurement management, in addition to software updates

The C 6000 isoperibol Package 1/10 consists of:

- C 6000 isoperibol
- C 6010 Decomposition vessel, standard
- RC 2 basic Cooling water supply

Accessories: C 6040 CalWin, C 5041.10 Connection cable, C 6010 Decomposition vessel, standard, C 6012 Decomposition vessel, halogen resistant, C 1.50 Dot matrix printer, C 6030 Venting station, C 60.1012 Organizer, C 6000.10 Set of spare parts, C 6000.12 Set of spare parts, C 1.103 Ignition wire, C 1.123 Ignition wire platinum, C 27 Calorimeter preparation set, C 29 Pressure gauge, oxygen, C 21 Pelleting press, C 5010.8 Crucible holder small, C 5010.5 Crucible holder big, C 5020 Sample rack, C 25 Pressure regulating valve, C 710.4 Cotton thread, cut to length, C 710.8 Cotton thread, C 4 Quartz dish, C 5 Set of VA combustion crucibles, C 6 Quartz crucible, big, C

#### Technical Data

|  |                       |
|--|-----------------------|
| Measuring range max. [J]                                   | 40000                 |
| Measuring mode dynamic 22°C                                | yes                   |
| Measuring mode isoperibol 22°C                             | yes                   |
| Measuring mode dynamic 25°C                                | yes                   |
| Measuring mode isoperibol 25°C                             | yes                   |
| Measuring mode dynamic 30°C                                | yes                   |
| Measuring mode isoperibol 30°C                             | yes                   |
| Measurements/h dynamic                                     | 6                     |
| Measurements/h isoperibol                                  | 4                     |
| Reproducibility dynamic (1g benzoic acid NBS39i) [%RSD]    | 0.15                  |
| Reproducibility isoperibol (1g benzoic acid NBS39i) [%RSD] | 0.05                  |
| Touchscreen  | yes                   |
| Working temperature [°C]                                   | 22 - 30               |
| Temperature measurement resolution [K]                     | 0.0001                |
| Cooling medium temperature [°C]                            | 12 - 27               |
| Cooling medium permissible operating pressure [bar]        | 1.5                   |
| Cooling medium   | tap water             |
| Type of cooling  | flow                  |
| Chiller  | RC 2 basic            |
| Flow rate [l/h]  | 60 - 70               |
| Rec. flow rate at 18°C [l/h]                               | 60                    |
| Oxygen operating pressure max. [bar]                       | 40                    |
| Interface scale  | RS232                 |
| Interface printer  | USB                   |
| Interface PC   | RS232                 |
| Interface test rack  | yes                   |
| Interface ext. keyboard                                    | yes                   |
| Oxygen filling   | yes                   |
| Degasification   | yes                   |
| Decomposition detection                                    | yes                   |
| Decomposition vessel C 6010                                | yes                   |
| Analysis according to DIN 51900                            | yes                   |
| Analysis according to DIN EN ISO 1716                      | yes                   |
| Analysis according to DIN EN ISO 9831                      | yes                   |
| Analysis according to DIN EN 15170                         | yes                   |
| Analysis according to DIN CEN TS 14918                     | yes                   |
| Analysis according to ASTM D240                            | yes                   |
| Analysis according to ASTM D4809                           | yes                   |
| Analysis according to ASTM D1989                           | yes                   |
| Analysis according to ASTM D5865                           | yes                   |
| Analysis according to ASTM E711                            | yes                   |
| Analysis according to ISO 1928                             | yes                   |
| Analysis according to GB T213                              | yes                   |
| Dimensions (W x H x D) [mm]                                | 500 x 425 x 450       |
| Weight [kg]  | 29                    |
| Permissible ambient temperature [°C]                       | 20 - 30               |
| Permissible relative humidity [%]                          | 80                    |
| Protection class according to DIN EN 60529                 | IP 20                 |
| RS 232 interface   | yes                   |
| USB interface  | yes                   |
| Voltage [V]  | 220 - 240 / 100 - 120 |
| Frequency [Hz]   | 50/60                 |
| Power input [W]  | 1700                  |
| <b>Ident. No.</b>  | <b>0010000565</b>     |

710.2 Set of VA combustion crucibles, C 9 Gelatine capsules, C 10 Acetobutyrate capsules, C 12 Combustion bags 40 x 35 mm, C 12 A Combustion bags 70 x 35 mm, C 15 Paraffin strips, C 16 Parafilm, C 17 Paraffin, C 43 Benzoic acid NBS 39i, C 723 Benzoic acid, blister package, C 723 Benzoic acid BIG Package, AOD 1.11 Control standard, AOD 1.12 Control standard, C 6000.1 Water protect, 100 ml