



1 Laboratory refrigerators FKEX

Liebherr commercial refrigerator with spark-free interior. Full-volume refrigeration with rear wall evaporator. Automatic defrosting; defrost water evaporates automatically. Lockable door. Door hinges can be reversed. Front ventilation enables installation within bench units.

Liebherr

Adjustable temperature range: from +2 to +10°C
 Ambient temperature: from +10 to +32°C

| Type | Capacity L | Energy consumption kWh (24h) | Power W | Weight kg | Width mm | Depth mm | Height mm | PK | Cat. No. |
|-----------|---------------|---------------------------------|------------|--------------|-------------|-------------|--------------|----|-----------|
| FKEX 1800 | 180 | 0.7 | 90 | 39 | 600 | 600 | 885 | 1 | 9.698 653 |
| FKEX 2600 | 260 | 0.8 | 100 | 48 | 600 | 600 | 1216 | 1 | 9.698 654 |
| FKEX 3600 | 360 | 0.9 | 130 | 62 | 600 | 600 | 1590 | 1 | 9.698 655 |
| FKEX 5000 | 500 | 0.9 | 130 | 78 | 752 | 710 | 1516 | 1 | 9.698 656 |

Laboratory refrigerators and freezers

The Profi electronic control system includes text display and integral real-time clock and therefore meets the highest requirements. It is equipped with a volt-free contact for connection to a remote warning system, an infrared interface and an RS485 serial interface, enabling networking with central monitoring systems.

Liebherr

The interior temperature can be set to 1/10°C accuracy and is indicated accordingly in the display.

- dynamic cooling
- precision electronic control with alphanumeric info display and real time displayed
- one cooling programme is preset
- temperature, door-open and power failure alarms
- integrated data memory
- 3-point calibration
- a provision for an external temperature sensor is fitted near the compressor compartment
- self-closing door for reliable storage of sensitive products
- capability of connecting a NTC product temperature probe
- with wheels, two with brakes
- insulated glass doors with interior lighting (LKPv 6522, LKPv 1422)
- plastic coated shelves
- a high performance 12V battery automatically cuts in if power fails and allows the appliance to monitor and register the interior temperature continuously for up to 72 hours
- the compressor compartment panel can be raised for cleaning or servicing purposes
- the Profi electronic defrosts the cabinet automatically only when required, thus saving energy
- the defrost cycle is very short and as a result, the temperature in the interior remains almost constant

| Type | Capacity L | External dimensions (W x D x H) mm | Internal dimensions (W x D x H) mm | Energy consumption kWh (24h) | Temp. range °C | PK | Cat. No. |
|-----------|---------------|--|--|---------------------------------|-------------------|----|--------------------|
| LKPv 1422 | 1427 | 1430 x 830 x 2150 | 1263 x 650 x 1550 | 3.9 | 0 ... +16 | 1 | 9.698 689 2 |
| LKPv 6522 | 601 | 700 x 830 x 2150 | 533 x 650 x 1550 | 2.7 | 0 ... +16 | 1 | 9.698 687 3 |
| LKPv 1420 | 1427 | 1430 x 830 x 2150 | 1263 x 650 x 1550 | 2.3 | -2 ... +16 | 1 | 9.698 688 4 |
| LKPv 6520 | 601 | 700 x 830 x 2150 | 533 x 650 x 1550 | 1.8 | -2 ... +16 | 1 | 9.698 686 5 |
| LGPv 1420 | 1427 | 1430 x 830 x 2150 | 1263 x 650 x 1550 | 8.9 | -10 ... -26 | 1 | 9.698 693 6 |
| LGPv 6520 | 601 | 700 x 830 x 2150 | 533 x 650 x 1550 | 4.7 | -10 ... -35 | 1 | 9.698 692 7 |



Laboratory refrigerators and laboratory fridge-freezer

The Mediline laboratory refrigerators with Comfort controller provide maximum storage space on a 600mm footprint. The under-worktop models are 820mm high and will fit almost any site. These appliances meet the exacting demands made of laboratory appliances. The product range offers two upright and two under-worktop laboratory refrigerators, in each version with glass door or solid door versions. The temperature can be set from +3°C to +8°C. The forced-air cooling system in conjunction with the accurate electronic controller system ensures high temperature consistency and equal temperature across the interior.

Liebherr

- comfort electronic controller with an accuracy of 1/10°C.
- safety features enable a variety of alarm functions for connection to an external alarm system
- hygienic interior liner
- the appliances have a volt-free contact and an RS485 serial bus interface for central temperature monitoring and alarm documentation.
- a provision for an external temperature sensor is fitted near the compressor compartment
- self-closing door
- temperature, door-open and power failure alarms
- integrated data memory with min/max temperatures
- 1-point calibration
- capability of connecting a NTC product temperature probe

LCV 4010: has two separately adjustable cooling circuits and two compressors.

| Type | Capacity l | External dimensions (W x D x H) mm | Internal dimensions (W x D x H) mm | Energy consumption kWh (24h) | Temp. range °C | PK | Cat. No. |
|-------------------------|---------------|--|--|---------------------------------|---------------------|----|--------------------|
| | | | | | | | |
| LKv 3912 | 360 | 600 x 615 x 1840 | 440 x 435 x 1635 | 1.3 | +3 ... +8 | 1 | 9.698 684 1 |
| LKv 3910 | 360 | 600 x 615 x 1840 | 440 x 435 x 1635 | 0.8 | +3 ... +8 | 1 | 9.698 683 2 |
| LKUv 1612 | 141 | 600 x 615 x 820 | 440 x 435 x 670 | 1.0 | +3 ... +8 | 1 | 9.698 681 3 |
| LKUv 1610 | 141 | 600 x 615 x 820 | 440 x 435 x 670 | 0.7 | +3 ... +8 | 1 | 9.698 680 4 |
| LCv 4010 fridge freezer | 254/ 107 | 600 x 615 x 2000 | 440 x 435 x 1105 431 x 435 x 597 | 1.8 | +3...+8 -9...-30 | 1 | 7.627 795 5 |



Laboratory refrigerators and freezers with spark-free interior

The range of laboratory appliances with Comfort controller comprises 2 refrigerators and 2 freezers with spark-free interiors, especially for storing explosive and highly flammable substances - for instance in the chemical industry or in special laboratories. These models have been tested by electrosuisse - SEV (Swiss Association for Electrical Engineering, Power and Information Technologies), the ATEX conformity evaluation organisation, for compliance with the safety requirements of the EU Directive 94/9/EC (ATEX 95) according to the harmonised standards EN 1127-1, IEC 60079-0 and IEC 60079-15, and they provide all the other advantages of the Comfort electronic controller.

Liebherr

- comfort electronic controller with an accuracy of 1/10°C
- safety features enable a variety of alarm functions for connection to an external alarm system
- hygienic interior liner
- the appliances have a volt-free contact and an RS485 serial bus interface for central temperature monitoring and alarm documentation
- a provision for an external temperature sensor is fitted near the compressor compartment
- self-closing door
- temperature, door-open and power failure alarms
- integrated data memory with min/max temperatures
- 1-point calibration
- capability of connecting a NTC product temperature probe



| Type | Capacity L | External dimensions (W x D x H) mm | Internal dimensions (W x D x H) mm | Energy consumption kWh (24h) | Temp. range °C | PK | Cat. No. |
|-------------|---------------|--|--|---------------------------------|-------------------|----|--------------------|
| | | | | | | | |
| LKexv 3910 | 360 | 600 x 615 x 1840 | 440 x 435 x 1635 | 0.9 | +3 ... +8 | 1 | 9.698 685 6 |
| LKUexv 1610 | 141 | 600 x 615 x 820 | 440 x 435 x 670 | 0.9 | +3 ... +8 | 1 | 9.698 682 7 |
| LGex 3410 | 310 | 600 x 615 x 1840 | 420 x 400 x 1587 | 1.3 | -9 ... -30 | 1 | 9.698 691 8 |
| LGUex 1500 | 139 | 600 x 615 x 820 | 454 x 450 x 663 | 0.9 | -9 ... -26 | 1 | 9.698 690 8 |



1 Laboratory refrigerators, spark-free

The BGR 120 laboratory guidelines state that interiors of refrigerators in which dangerous, explosive atmospheres can develop, must be spark-free. Such explosive atmospheres can be created by stored flammable liquids, for example. The laboratory refrigerators by Aqualytic® meet these requirements. The interiors are free from sparking sources and are therefore explosion-proof. With glass shelves.

AQUALYTIC

Variable temperature control from +2°C to +10°C. Temperature is continuously controlled by thermostat.

| Capacity | External dimensions (W x D x H) | Weight | Power | PK | Cat. No. |
|----------|---------------------------------|--------|-------|----|-----------|
| L | mm | kg | W | | |
| 150 | 602 x 600 x 885 | 37.00 | 120 | 1 | 9.699 001 |
| 210 | 602 x 600 x 1215 | 46.50 | 140 | 1 | 9.699 002 |
| 295 | 602 x 600 x 1589 | 62.00 | 150 | 1 | 9.699 003 |
| 425 | 755 x 715 x 1515 | 77.00 | 150 | 1 | 9.699 004 |



2 Ultra low temperature freezer, SECURE.GUARD™

NEW!

The new BINDER SECURE.GUARD™ Ultra low temperature freezer from BINDER secures a long-term storage of samples at -86°C. SECURE.GUARD™ is based on a multi-stage security concept, which offers everything that laboratory staff want from reliable operation to ease of use and system integration to the emergency exchange service. Voltage 230V 1N, ~50Hz.

BINDER

Advantages:

- GUARD.CONTROL™ opens the freezer by pressing a button
- GUARD.CONTROL™ RFID technology personalizes access and records user traffic
- DATA.SECURE™ Data logger with USB connection
- SERVICE.PRO™ provides 24/7/365 exchange service and an extended 4 year guarantee

Areas of application:

- Biotechnology
- Clinics/University Hospitals
- Pharmaceuticals Industry

Shelves are included. Racks and boxes must be ordered separately.

| Type | Capacity | Internal dimensions (W x D x H) | External dimensions (W x D x H) | Weight | Door handle | PK | Cat. No. |
|----------|----------|---------------------------------|---------------------------------|--------|-------------|----|-----------|
| | L | mm | mm | kg | | | |
| UF V 300 | 365 | 442 x 635 x 1300 | 755 x 890 x 1970 | 300 | right | 1 | 9.883 660 |
| UF V 500 | 485 | 588 x 635 x 1300 | 900 x 890 x 1970 | 320 | right | 1 | 9.883 661 |
| UF V 700 | 725 | 880 x 635 x 1300 | 1200 x 890 x 1970 | 360 | right | 1 | 9.883 662 |
| UF V 300 | 365 | 442 x 635 x 1300 | 755 x 890 x 1970 | 300 | left | 1 | 9.883 665 |
| UF V 500 | 486 | 588 x 635 x 1300 | 900 x 890 x 1970 | 320 | left | 1 | 9.883 666 |
| UF V 700 | 725 | 880 x 635 x 1300 | 1200 x 890 x 1970 | 360 | left | 1 | 9.883 667 |



Accessories for ultra low temperature freezer, SECURE.GUARD™

NEW!

BINDER

| For | Description | PK | Cat. No. |
|-----------------|---|----|-----------|
| all UF V models | Access port 30 mm, back side | 1 | 9.883 670 |
| all UF V models | Sample divider | 1 | 9.883 671 |
| all UF V models | CO2 back up system | 1 | 9.883 672 |
| all UF V models | Ethernet interface | 1 | 9.883 673 |
| all UF V models | Additional PT 100 sensor with lemo socket, back side | 1 | 9.883 674 |
| all UF V models | Remote alarm box GSM | 1 | 9.883 675 |
| all UF V models | Advanced voltage booster | 1 | 9.883 676 |
| all UF V models | Read-out box RFID system | 1 | 9.883 677 |
| UF V 300 | PDF Data logger with USP port | 1 | 9.883 678 |
| UF V 300 | Chart recorder UF V 300 (external) | 1 | 9.883 679 |
| UF V 300 | Deicing kit including deicing tray, wiper and scratch | 1 | 9.883 680 |
| UF V 300 | Water cooling | 1 | 9.883 681 |
| UF V 500 | PDF Data logger with USP port | 1 | 9.883 682 |
| UF V 500 | Chart recorder UF V 500 (internal) | 1 | 9.883 683 |
| UF V 500 | Deicing kit including deicing tray, wiper and scratch | 1 | 9.883 684 |
| UF V 500 | Water cooling | 1 | 9.883 685 |
| UF V 700 | PDF Data logger with USP port | 1 | 9.883 686 |
| UF V 700 | Chart recorder UF V 700 | 1 | 9.883 687 |
| UF V 700 | Deicing kit including deicing tray, wiper and scratch | 1 | 9.883 688 |
| UF V 700 | Water cooling | 1 | 9.883 689 |

1 Chest and Upright Freezers

Microprocessor controlled temperature regulation

The microprocessor controlled temperature regulator, with digital display of actual and set temperature values operates without maintenance and is shock-resistant. The regulator is battery-backed by constantly charged NiCd battery that maintains the display of the actual temperature and the alarm functions for 60 hours in the event of mains failure. During operation on the mains, the battery level and the set temperature can be checked by touch control. With RS-232 interface, compatible e.g. to the PC software labworldsoft®. Alternative data transfer formats, RS-422 and RS-485, are also available.

GFL



Energy-saving cooling unit

The maintenance-free cooling unit, equipped with hermetically sealed, high-performance compressors, ensures short cooling times. The refrigerant is non-flammable. The all around insulation comprises an up to 150mm thick, seamless and diffusion-protected foamed-in polyurethane layer.

Ex-proof inside cabinets

The inside cabinets are manufactured entirely out of stainless steel (material no 1.4301), are corrosion resistant and easy to clean. They are free from ignition sources, an extremely important aspect when storing low flash-point media and are ex-proof in accordance with BG-I 850-0, version 02/2009. The cooling air outlet is located at the front of the unit, meaning that explosive gases can not be drawn in. The magnetic sealing system reliably prevents freezing of the lid or door seals.

Powder-coated housing

The housings are made of powder-coated, electrolytically galvanized sheet steel. As standard, GFL deep freezers are mounted on double wheel, swivel castors, two of which can be locked, for transport to the place of use and for mobile applications (castors for the sub-counter Deep Freezers 6441 and 6481).

Controlled access

The lids and doors of the freezer units can be locked, a control panel provides controlled access through the use of a key-operated security switch.

Multiple alarm messages

All deep freezers include a potential-free, changeover contact for connection to an internal alarm system or to the central I&C system as standard. They are also provided with a connection for a piezoelectric buzzer. In the event of a fault an optical and audible alarm is issued. The cause for the fault is shown in the display as a defined code number. The limit values for alarms (1-20 K) for excess and under temperature can be set individually by the user. Optional suppressions of alarm messages can also be set by the user.

Accessories appropriate for the task at hand and storage system available on request. Customised equipment available on request, for tasks that demand special solutions for storage.



1 Chest Freezers

All chest lids are balanced and easy to operate. Chest freezers with capacities of 220 to 500 litres are also equipped with additional insulating cover panels on the cabinet.

GFL

| Type | Capacity | External dimensions (W x D x H) mm | Internal dimensions (W x D x H) mm | Weight | | Temp. range °C | PK | Cat. No. |
|------|----------|--|--|--------|------|-------------------|----|-----------|
| | L | | | kg | kW | | | |
| 6340 | 70 | 836 x 685 x 1055 | 600 x 350 x 340 | 100 | 0.60 | 0 to -40 | 1 | 9.699 340 |
| 6341 | 30 | 700 x 600 x 905 | 500 x 305 x 200 | 70 | 0.60 | 0 to -40 | 1 | 9.699 341 |
| 6342 | 100 | 960 x 790 x 1080 | 710 x 440 x 340 | 180 | 0.60 | 0 to -40 | 1 | 9.699 342 |
| 6343 | 220 | 1450 x 870 x 1040 | 840 x 460 x 580 | 210 | 0.60 | 0 to -40 | 1 | 9.699 343 |
| 6344 | 300 | 1610 x 910 x 1060 | 1000 x 500 x 600 | 240 | 0.60 | 0 to -40 | 1 | 9.699 344 |
| 6345 | 500 | 2060 x 1000 x 1060 | 1440 x 580 x 600 | 310 | 1.20 | -50 to -85 | 1 | 9.699 345 |
| 6380 | 70 | 836 x 685 x 1055 | 600 x 350 x 340 | 120 | 1.20 | -50 to -85 | 1 | 9.699 380 |
| 6381 | 30 | 700 x 600 x 905 | 500 x 305 x 200 | 90 | 1.20 | -50 to -85 | 1 | 9.699 381 |
| 6382 | 100 | 960 x 790 x 1080 | 710 x 440 x 340 | 200 | 1.20 | -50 to -85 | 1 | 9.699 382 |
| 6383 | 220 | 1450 x 870 x 1040 | 840 x 460 x 580 | 230 | 1.20 | -50 to -85 | 1 | 9.699 383 |
| 6384 | 300 | 1610 x 910 x 1060 | 1000 x 500 x 600 | 260 | 1.20 | -50 to -85 | 1 | 9.699 384 |
| 6385 | 500 | 2060 x 1000 x 1060 | 1440 x 580 x 600 | 330 | 1.20 | -50 to -85 | 1 | 9.699 385 |

2 3 Upright Freezers

Upright freezers of 300 litres and 500 litres are equipped with three inner compartments (H 353mm), each provided with an insulating door. Optional shelves can also be installed in the compartments. On request, the cabinet can also be equipped with a set of drawers instead of the inside compartments.

GFL

After removing the cover plate, the sub-counter Deep Freezers 6441 and 6481 can be built into a laboratory bench.

| Type | Capacity | Internal dimensions (W x D x H) mm | External dimensions (W x D x H) mm | Weight | | Temp. range °C | PK | Cat. No. |
|------|----------|--|--|--------|------|-------------------|----|-----------|
| | L | | | kg | kW | | | |
| 6441 | 96 | 430 x 430 x 510 | 900 x 770 x 890 | 140 | 0.45 | 0 to -40 | 1 | 9.699 501 |
| 6443 | 300 | 600 x 450 x 1100 | 990 x 865 x 1940 | 240 | 0.60 | 0 to -40 | 1 | 9.699 503 |
| 6445 | 500 | 600 x 760 x 1100 | 990 x 1175 x 1940 | 310 | 0.60 | 0 to -40 | 1 | 9.699 504 |
| 6481 | 96 | 430 x 430 x 510 | 900 x 770 x 890 | 150 | 0.90 | -50 to -85 | 1 | 9.699 502 |
| 6483 | 300 | 600 x 450 x 1100 | 990 x 865 x 1940 | 270 | 1.20 | -50 to -85 | 1 | 9.699 495 |
| 6485 | 500 | 600 x 760 x 1100 | 990 x 1175 x 1940 | 340 | 1.20 | -50 to -85 | 1 | 9.699 497 |



4 Safety Cooling Systems

Accessories for Chest and Upright Freezers.

GFL

CO₂/LN₂ safety cooling systems for connection to a 230V emergency power system or for battery-powered operation (supplied with power from a battery provided with the system, approx. 60 h). Temperature of the cabinet is kept constant at a freely selectable value (0 to -70°C) by controlled injection of CO₂ or LN₂. For chest freezers with a volume of 70 litres or above and upright freezers from 300 litres capacity upwards. Refrigerant vessel not included.

| Type | For | PK | Cat. No. |
|--------------------------------------|---------|----|-----------|
| 6946a LN ₂ safety cooling | 230V | 1 | 9.699 452 |
| 6946b LN ₂ safety cooling | Battery | 1 | 9.699 453 |
| 6947a CO ₂ safety cooling | 230V | 1 | 9.699 447 |
| 6947b CO ₂ safety cooling | Battery | 1 | 9.699 451 |

7. Heating and cooling technology

Cooling/Chest, Upright freezers, Ice makers

1 Distribution Lines for Safety Cooling System with CO₂

For CO₂ safety cooling systems 6947a and 6947b (CO₂ bottles not included in scope of supply). For simultaneous connection of two or three CO₂ bottles distribution lines are required. The CO₂ bottles must be provided with a rising pipe and must not be connected to a pressure limiter. The distribution line can be ordered complete with all requisite connectors, tubes and materials for wall mounting.

GFL



| Type | For | PK | Cat. No. |
|------|---------------------------|----|-----------|
| 6948 | 2 CO ₂ bottles | 1 | 9.699 448 |
| 6949 | 3 CO ₂ bottles | 1 | 9.699 449 |

Water cooling 6960

Accessory for Chest and Upright Freezers.

GFL

A heat exchanger is installed in place of the air-cooled liquefier. The heat exchanger considerably reduces the heat given off by the unit to the environment, at the same time, expanding the permissible ambient temperature range in which the unit can be operated. Water supply is regulated by the freezer. The heat exchanger can be connected to a recirculation system or to the internal water supply system. (Connecting points on unit: outside thread connector for pressure hose 1/2 inch *with lock nut.) For freezers with a volume of at least 220 litres.

| Type | PK | Cat. No. |
|------|----|-----------|
| 6960 | 1 | 9.699 454 |

* not in scope of supply

Qualification data record

For detailed documentation of the spatial and temporal temperature constancy in the deep freezers, when users must, for example, comply with the special approval guidelines defined by the Federal Drug Administration of the USA (FDA). All requested test and measurement data are established at our factory using a calibrated test section and archived at GFL for one decade.

GFL

| Type | Description | PK | Cat. No. |
|------|--------------------|----|-----------|
| 6965 | Measurement report | 1 | 9.699 565 |

2 Drawer Sets for Upright Freezers (300/500 l volume)

To equip the cabinet of upright freezers with a set of four drawers in place of the three insulated compartments. Made of stainless steel with front panels made of 10mm thick polystyrene insulating plates. Ball bearings and slide rails ensure easy and level motion.

GFL

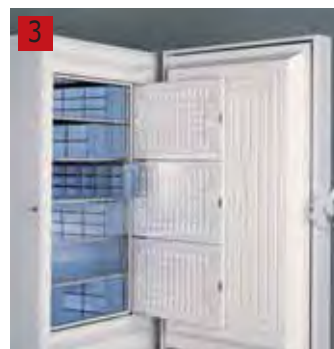


| Type | For | PK | Cat. No. |
|------|-----------------------|----|-----------|
| 6952 | Upright freezer, 300L | 4 | 9.699 456 |
| 6953 | Upright freezer, 500L | 4 | 9.699 457 |

3 Additional Shelves for 300/500litre Upright Freezers

Upright Freezers having a storage volume of 300 and 500 litres come with three compartments as standard equipment. As an option, each compartment can be sectioned with one additional shelf for optimal utilisation of the internal volume of the unit.

GFL



| Type | For | PK | Cat. No. |
|------|--------------------|----|-----------|
| 6954 | 300 litre freezers | 1 | 9.699 458 |
| 6955 | 500 litre freezers | 1 | 9.699 459 |

Storage system for Chest and Upright Freezers (racks to accept boxes, inner dividers for boxes and racks for Microtiter and DeepWell plates) available on request.

Cooling/Chest, Upright freezers, Ice makers

1



1 Freezers, UNI series

The UNI series have a range from -10 to -45°C, allowing particularly sensitive samples to be stored at low temperature. Operate at ambient temperatures up to 30°C.

Elcold

- audible alarm
- large temperature display
- easily operated controller for temperature setting between -10°C and -45°C
- electronic thermostat
- handle with key lock
- defrost water drain hole

| Type | Capacity litres | External dimensions (W x D x H) mm | Internal dimensions (W x D x H) mm | PK | Cat. No. |
|--------|--------------------|--|--|----|-----------|
| UNI 11 | 130 | 725 x 655 x 865 | 520 x 450 x 650 | 1 | 9.699 611 |
| UNI 21 | 226 | 1055 x 655 x 865 | 850 x 450 x 650 | 1 | 9.699 612 |
| UNI 31 | 299 | 1305 x 655 x 865 | 1100 x 450 x 650 | 1 | 9.699 613 |
| UNI 41 | 358 | 1505 x 655 x 865 | 1300 x 450 x 650 | 1 | 9.699 614 |
| UNI 51 | 416 | 1705 x 655 x 865 | 1500 x 450 x 650 | 1 | 9.699 615 |

Alternative freezer sizes available on request!

2



2 Freezers, LAB series

The LAB series storage freezers operate in the range -60 to -85°C at ambient temperatures from 10 to 30°C.

Elcold

- audible alarm with battery back up
- alarm box with output for external alarm
- inlet for CO₂ back up system
- large temperature display
- easily operated controller for temperature setting between -60°C and -85°C
- electronic thermostat
- heavy duty castors for easy moving
- handle with key lock
- defrost water drain hole

Optional equipment for CO₂ backup and data logger is available.

| Type | Capacity litres | External dimensions (W x D x H) mm | Internal dimensions (W x D x H) mm | PK | Cat. No. |
|--------|--------------------|--|--|----|-----------|
| LAB 11 | 130 | 720 x 650 x 920 | 520 x 450 x 650 | 1 | 9.699 600 |
| LAB 31 | 301 | 1300 x 650 x 920 | 1100 x 450 x 650 | 1 | 9.699 601 |
| LAB 41 | 360 | 1500 x 730 x 920 | 1300 x 450 x 650 | 1 | 9.699 602 |
| LAB 51 | 416 | 1700 x 650 x 920 | 1500 x 450 x 650 | 1 | 9.699 603 |



7. Heating and cooling technology

Cooling/Chest, Upright freezers, Ice makers-Cryogenic boxes, racks

1 Ice flake makers

Manufactured under DIN ISO 9001 conditions. For solid, even, ice flakes. Hygienic, 0.5°C cold ice. With stainless steel outer casing and air-cooled compressor.

HIBU

Also available with water-cooled compressor, except model AF 100. Alternative models available on request. A specially built model for laboratory-grade water is available on request at an additional charge.

| Type | Output kg/24 hrs. up to kg | Capacity kg | Rating W | Width mm | Length mm | Height mm | PK | Cat. No. |
|--|--------------------------------------|--------------------|-----------------|-----------------|------------------|------------------|----|-----------|
| Ice flake maker AF 80 | 70 | 25 | 330 | 626 | 535 | 933 | 1 | 9.580 006 |
| Ice flake maker AF 100 | 85 | 32 | 400 | 622 | 592 | 1126 | 1 | 9.580 007 |
| Ice flake maker AF 200 | 120 | 32 | 520 | 622 | 592 | 1126 | 1 | 9.580 008 |
| Ice flake maker MF 26* | 120 | | 500 | 533 | 560 | 525 | 1 | 9.580 009 |
| Ice flake maker MF 36* | 200 | | 760 | 533 | 560 | 525 | 1 | 9.580 016 |
| Storage B 193 for MF 26 and MF 36 | | 90 | | 800 | 560 | 940 | 1 | 9.580 010 |
| Storage B 393 for MF 26 and MF 36** | | 150 | | 825 | 765 | 900 | 1 | 9.580 017 |
| Cover KBT 103 for storage B 393 | | | | | | | 1 | 9.580 018 |

* without storage bin

**Cover KBT 103 required. Please order separately.

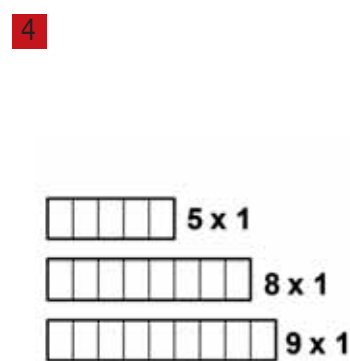
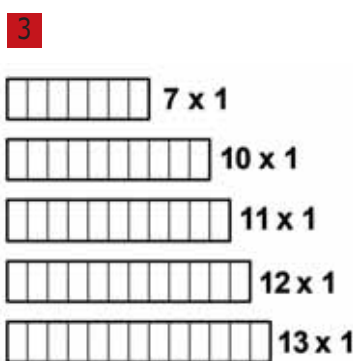
2 3 4 Chest Freezers Racks, vertical



Stainless steel racks, suitable for all brands of chest freezer. For boxes up to 135 x 135mm.

Heathrow Scientific

| Type | Height Box mm | Width mm | Depth mm | Height mm | PK | Cat. No. |
|------|-------------------------|-----------------|-----------------|------------------|----|-----------|
| 7x1 | approx. 53 | 140 | 141 | 390 | 1 | 9.698 962 |
| 10x1 | approx. 53 | 140 | 141 | 557 | 1 | 9.698 746 |
| 11x1 | approx. 53 | 140 | 141 | 613 | 1 | 9.698 963 |
| 12x1 | approx. 53 | 140 | 141 | 669 | 1 | 9.698 964 |
| 13x1 | approx. 53 | 140 | 141 | 724 | 1 | 9.698 965 |
| 5x1 | approx. 78 | 140 | 141 | 406 | 1 | 9.698 967 |
| 8x1 | approx. 78 | 140 | 141 | 649 | 1 | 9.698 966 |
| 9x1 | approx. 78 | 140 | 141 | 730 | 1 | 9.698 968 |

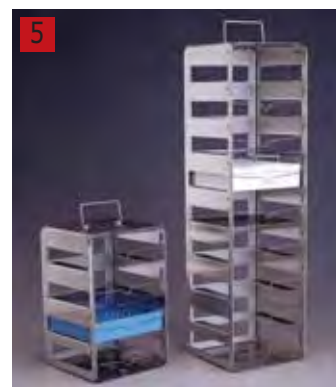


5 Vertical cryobox racks, vertical, Type 5036

Stainless steel. With individual retainers to secure each box safely.

Nalgene

| Type | Height Box mm | Shelves | Width mm | Depth mm | Height mm | PK | Cat. No. |
|------|-------------------------|---------|-----------------|-----------------|------------------|----|-----------|
| 5036 | approx. 52 | 4 | 140 | 143 | 225 | 1 | 9.400 953 |
| 5036 | approx. 52 | 9 | 140 | 143 | 502 | 1 | 9.400 954 |



Cooling/Cryogenic boxes, racks



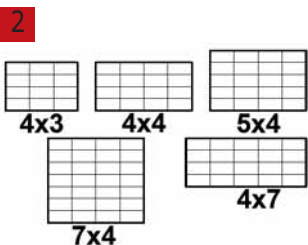
1 2 Upright Freezer Racks

NEW!

Stainless steel racks, suitable for all brands of upright freezers. For boxes up to 135mm x 135mm.

Heathrow Scientific

| Type | Height Box | Width | Depth | Height | PK | Cat. No. |
|------|------------|-------|-------|--------|----|-----------|
| | mm | mm | mm | mm | | |
| 4x3 | approx. 53 | 418 | 140 | 225 | 1 | 9.698 970 |
| 4x4 | approx. 53 | 556 | 140 | 225 | 1 | 9.698 969 |
| 5x3 | approx. 53 | 418 | 140 | 280 | 1 | 9.698 974 |
| 5x4 | approx. 53 | 556 | 140 | 280 | 1 | 9.698 971 |
| 7x4 | approx. 53 | 556 | 140 | 392 | 1 | 9.698 972 |
| 4x5 | approx. 53 | 695 | 140 | 225 | 1 | 9.698 973 |
| 3x3 | approx. 78 | 418 | 140 | 245 | 1 | 9.698 976 |
| 3x4 | approx. 78 | 556 | 140 | 245 | 1 | 9.698 975 |
| 4x4 | approx. 78 | 556 | 140 | 326 | 1 | 9.698 960 |
| 5x4 | approx. 78 | 556 | 140 | 407 | 1 | 9.698 961 |



3 4 Racks for upright freezers Arctic Squares®

Heathrow Scientific

Stainless steel. Fits most standard upright freezers. Overall rack size (H x W x D): 238 x 139 x 571mm. With four drawers to hold 16 boxes of 133 x 133 x 53mm.

Drawers feature a unique stop that when fully extended pivot down allowing for easy box access. Freezer rack also includes a pull-out wire handle for easy removal off the shelf. Polycarbonate drawer handles provide a user-friendly grip. Includes a slot and label for drawer/sample identification.



| Type | PK | Cat. No. |
|-----------------|----|-----------|
| Arctic Squares® | 1 | 9.193 980 |



5 LLG-Cryogenic storage boxes, standard, 136 x 136

NEW!

Freezer and cryogenic storage boxes (CryoBoxes). 136 x 136mm square.

For the storage of samples. Made of freezing-resistant, water-repellent, coated cardboard. With lid. Colours as indicated.

| Int. height mm | Colour | PK | Cat. No. |
|----------------|--------|----|-----------|
| 32 | white | 1 | 6.088 950 |
| 32 | yellow | 1 | 6.802 292 |
| 32 | blue | 1 | 6.802 293 |
| 32 | red | 1 | 6.260 000 |
| 32 | green | 1 | 6.260 001 |
| 50 | white | 1 | 9.401 000 |
| 50 | yellow | 1 | 9.401 002 |
| 50 | blue | 1 | 9.401 004 |
| 50 | green | 1 | 9.401 013 |
| 50 | red | 1 | 9.401 015 |
| 75 | white | 1 | 9.401 030 |
| 75 | yellow | 1 | 9.401 032 |
| 75 | blue | 1 | 9.401 034 |
| 75 | green | 1 | 9.401 036 |
| 75 | red | 1 | 9.401 038 |
| 100 | white | 1 | 9.401 040 |
| 100 | yellow | 1 | 9.401 042 |
| 100 | blue | 1 | 9.401 044 |
| 100 | green | 1 | 9.401 046 |
| 100 | red | 1 | 9.401 048 |
| 130 | weiß | 1 | 6.057 279 |
| 130 | rot | 1 | 6.201 070 |
| 130 | green | 1 | 6.260 002 |
| 130 | yellow | 1 | 6.260 003 |
| 130 | blue | 1 | 6.228 311 |

7. Heating and cooling technology

Cooling/Cryogenic boxes, racks

1 LLG-Partition inserts for Cryoboxes, 136 x 136

NEW!

For cryoboxes 136 x 136mm. With compartment heights and formats as indicated.

| Height mm | Compartment- ments | PK | Cat. No. |
|--------------|-----------------------|----|-----------|
| 25 | 6 x 6 | 1 | 6.260 015 |
| 25 | 7 x 7 | 1 | 6.089 965 |
| 25 | 8 x 8 | 1 | 6.202 838 |
| 25 | 9 x 9 | 1 | 6.802 057 |
| 25 | 10 x 10 | 1 | 6.054 191 |
| 25 | 12 x 12 | 1 | 6.050 586 |
| 25 | 13 x 13 | 1 | 6.050 585 |
| 25 | 14 x 14 | 1 | 6.050 333 |
| 30 | 4 x 4 | 1 | 6.305 840 |
| 30 | 5 x 5 | 1 | 9.401 055 |
| 30 | 6 x 6 | 1 | 6.090 419 |
| 30 | 7 x 7 | 1 | 9.401 054 |
| 30 | 8 x 8 | 1 | 9.401 053 |
| 30 | 9 x 9 | 1 | 9.401 052 |
| 30 | 10 x 10 | 1 | 9.401 051 |
| 30 | 12 x 12 | 1 | 9.401 050 |
| 30 | 13 x 13 | 1 | 6.260 017 |
| 30 | 14 x 14 | 1 | 6.260 016 |
| 40 | 4 x 4 | 1 | 6.401 505 |
| 40 | 5 x 5 | 1 | 6.260 020 |
| 40 | 6 x 6 | 1 | 6.202 839 |
| 40 | 7 x 7 | 1 | 6.802 215 |
| 40 | 8 x 8 | 1 | 6.900 361 |
| 40 | 9 x 9 | 1 | 7.510 691 |
| 40 | 10 x 10 | 1 | 6.077 877 |
| 65 | 4 x 4 | 1 | 6.510 301 |
| 65 | 5 x 5 | 1 | 6.079 677 |
| 65 | 6 x 6 | 1 | 6.201 071 |
| 65 | 8 x 8 | 1 | 6.801 789 |
| 65 | 9 x 9 | 1 | 6.072 218 |
| 65 | 10 x 10 | 1 | 6.802 727 |
| 65 | 12 x 12 | 1 | 6.803 270 |
| 40 | 13 x 13 | 1 | 6.260 018 |
| 40 | 12 x 12 | 1 | 6.260 019 |



2 LLG-Cryogenic storage boxes, plastic coated, 136 x 136

NEW!

Freezer and cryogenic storage boxes (CryoBoxes). Made of cardboard, **plastic coated** without divider. Dimensions: 136 x 136mm square. For the storage of samples. With lid.

| Int. height mm | Colour | PK | Cat. No. |
|-------------------|--------|----|-----------|
| 32 | white | 1 | 6.802 214 |
| 32 | yellow | 1 | 6.231 450 |
| 32 | red | 1 | 6.231 451 |
| 32 | blue | 1 | 6.260 004 |
| 32 | green | 1 | 6.260 005 |
| 50 | white | 1 | 6.080 130 |
| 50 | yellow | 1 | 6.077 876 |
| 50 | blue | 1 | 6.077 875 |
| 50 | green | 1 | 6.081 021 |
| 50 | red | 1 | 6.081 022 |
| 75 | white | 1 | 6.802 726 |
| 75 | blue | 1 | 6.260 006 |
| 75 | red | 1 | 6.260 007 |
| 75 | green | 1 | 6.260 008 |
| 75 | yellow | 1 | 6.260 009 |
| 100 | white | 1 | 6.090 388 |
| 100 | blue | 1 | 6.260 010 |
| 100 | red | 1 | 6.260 011 |
| 100 | green | 1 | 6.260 012 |
| 100 | yellow | 1 | 6.260 013 |
| 130 | blue | 1 | 6.260 014 |
| 130 | red | 1 | 6.801 788 |
| 130 | white | 1 | 6.083 519 |
| 130 | green | 1 | 6.801 787 |



Cooling/Cryogenic boxes, racks

1


1 Cryogenic storage boxes, 1/1

Colour: white. Other colours are available on request. Freezer and cryogenic storage boxes (CryoBoxes). Made of freeze-resistant, water-repellent, coated cardboard. Dimensions: 136 x 136mm square. For the storage of samples. With lid.

Ratiolab

| Int. height mm | PK | Cat. No. |
|----------------|----|-----------|
| 32 | 1 | 9.405 860 |
| 50 | 1 | 9.405 861 |
| 75 | 1 | 9.405 862 |
| 100 | 1 | 9.405 863 |
| 130 | 1 | 9.405 864 |

Special sizes available on request!

2


2 Partition inserts for Cryoboxes

For cryoboxes 136 x 136mm. With compartment heights and formats as indicated.

Ratiolab

| Height mm | Compartment | PK | Cat. No. |
|-----------|-------------|----|-----------|
| 25 | 10 x 10 | 1 | 9.405 874 |
| 25 | 12 x 12 | 1 | 9.405 878 |
| 25 | 16 x 16 | 1 | 9.405 882 |
| 30 | 9 x 9 | 1 | 9.405 871 |
| 30 | 10 x 10 | 1 | 9.405 875 |
| 30 | 12 x 12 | 1 | 9.405 879 |
| 30 | 16 x 16 | 1 | 9.405 883 |
| 40 | 9 x 9 | 1 | 9.405 872 |
| 40 | 10 x 10 | 1 | 9.405 876 |
| 40 | 12 x 12 | 1 | 9.405 880 |
| 65 | 4 x 4 | 1 | 9.405 870 |
| 65 | 9 x 9 | 1 | 9.405 873 |
| 65 | 10 x 10 | 1 | 9.405 877 |
| 65 | 12 x 12 | 1 | 9.405 881 |

3


3 LLG-Cryogenic storage boxes, standard, 133 x 133

Freezer and cryogenic storage boxes (CryoBoxes). Cardboard, without internal dividers. Colour-coded, with lid. Dimensions: 133 x 133mm. For the storage of samples.

| Int. height mm | Colour | PK | Cat. No. |
|----------------|--------|----|-----------|
| 32 | white | 1 | 6.235 243 |
| 50 | yellow | 1 | 6.079 785 |
| 50 | blue | 1 | 6.079 786 |
| 50 | green | 1 | 6.079 787 |
| 50 | red | 1 | 6.079 788 |
| 50 | white | 1 | 6.090 495 |
| 75 | white | 1 | 6.087 345 |
| 75 | blue | 1 | 6.260 021 |
| 75 | red | 1 | 6.260 022 |
| 75 | green | 1 | 6.260 023 |
| 75 | yellow | 1 | 6.260 024 |
| 100 | blue | 1 | 6.260 025 |
| 100 | red | 1 | 6.260 026 |
| 100 | green | 1 | 6.260 027 |
| 100 | red | 1 | 6.260 028 |
| 100 | white | 1 | 6.082 970 |
| 130 | white | 1 | 6.803 050 |
| 130 | red | 1 | 6.206 128 |

Special sizes and colours available on request!

7. Heating and cooling technology

Cooling/Cryogenic boxes, racks

1 LLG-Cryogenic storage boxes, plastic coated, 133 x 133



Freezer and cryogenic storage boxes (CryoBoxes). Made of cardboard, **plastic coated** without divider. Dimensions: 133 x 133mm square. For the storage of samples. With lid.

| Int. height mm | Colour | PK | Cat. No. |
|----------------|--------|----|-----------|
| 32 | white | 1 | 6.260 029 |
| 32 | red | 1 | 6.234 735 |
| 32 | yellow | 1 | 6.234 736 |
| 32 | green | 1 | 6.801 699 |
| 32 | blue | 1 | 6.802 431 |
| 50 | red | 1 | 6.081 654 |
| 50 | white | 1 | 6.082 701 |
| 50 | grün | 1 | 6.084 538 |
| 50 | blue | 1 | 6.700 568 |
| 75 | red | 1 | 6.260 030 |
| 75 | yellow | 1 | 6.260 031 |
| 75 | white | 1 | 6.801 707 |
| 75 | green | 1 | 6.803 056 |
| 100 | white | 1 | 6.260 032 |
| 130 | white | 1 | 6.260 033 |

Special sizes and colours available on request!

1



2 LLG-Partition inserts for Cryoboxes, 133 x 133



For cryoboxes 133 x 133mm. With compartment heights and formats as indicated.

| Height mm | Compartment-ments | PK | Cat. No. |
|-----------|-------------------|----|-----------|
| 25 | 7 x 7 | 1 | 7.072 367 |
| 25 | 8 x 8 | 1 | 6.260 034 |
| 25 | 9 x 9 | 1 | 6.078 412 |
| 25 | 10 x 10 | 1 | 6.081 029 |
| 25 | 12 x 12 | 1 | 7.610 545 |
| 30 | 4 x 4 | 1 | 6.260 038 |
| 30 | 5 x 5 | 1 | 7.606 811 |
| 30 | 6 x 6 | 1 | 6.260 037 |
| 30 | 7 x 7 | 1 | 6.260 036 |
| 30 | 8 x 8 | 1 | 6.082 702 |
| 30 | 9 x 9 | 1 | 6.081 879 |
| 30 | 10 x 10 | 1 | 6.075 820 |
| 30 | 12 x 12 | 1 | 6.260 035 |
| 40 | 4 x 4 | 1 | 7.610 014 |
| 40 | 5 x 5 | 1 | 6.260 044 |
| 40 | 6 x 6 | 1 | 6.260 043 |
| 40 | 7 x 7 | 1 | 6.260 042 |
| 40 | 8 x 8 | 1 | 6.803 043 |
| 40 | 9 x 9 | 1 | 6.260 041 |
| 40 | 10 x 10 | 1 | 6.260 040 |
| 40 | 14 x 14 | 1 | 6.260 039 |
| 65 | 4 x 4 | 1 | 6.079 079 |
| 65 | 5 x 5 | 1 | 6.260 046 |
| 65 | 6 x 6 | 1 | 6.206 129 |
| 65 | 7 x 7 | 1 | 6.260 045 |
| 65 | 8 x 8 | 1 | 6.206 130 |
| 65 | 9 x 9 | 1 | 6.206 131 |

2



3 LLG-Cryogenic storage boxes, standard, 136 x 136



Freezer and cryogenic storage boxes (CryoBoxes). 136 x 136mm square. For the storage of samples. Made of cardboard. **With lid and divider.**

| Height mm | Length mm | Width mm | Colour | Array | PK | Cat. No. |
|-----------|-----------|----------|--------|---------|----|-----------|
| 25 | 136 | 136 | white | 16 x 16 | 1 | 6.260 047 |
| 25 | 136 | 136 | blue | 16 x 16 | 1 | 6.260 048 |
| 25 | 136 | 136 | red | 16 x 16 | 1 | 6.260 049 |
| 25 | 136 | 136 | green | 16 x 16 | 1 | 6.260 050 |
| 25 | 136 | 136 | yellow | 16 x 16 | 1 | 6.260 051 |
| 32 | 136 | 136 | white | 13 x 13 | 1 | 6.260 055 |
| 32 | 136 | 136 | blue | 13 x 13 | 1 | 6.260 056 |
| 32 | 136 | 136 | green | 13 x 13 | 1 | 6.260 057 |
| 50 | 136 | 136 | white | 10 x 10 | 1 | 6.260 061 |
| 50 | 136 | 136 | blue | 10 x 10 | 1 | 6.260 062 |
| 50 | 136 | 136 | green | 10 x 10 | 1 | 6.260 063 |
| 50 | 140 | 140 | white | 10 x 10 | 1 | 6.260 067 |
| 128 | 122 | 122 | white | 5 x 5 | 1 | 6.260 075 |
| 128 | 122 | 122 | white | 3 x 3 | 1 | 6.260 077 |
| 128 | 148 | 148 | white | 6 x 6 | 1 | 6.260 081 |
| 128 | 122 | 240 | white | 5 x 10 | 1 | 6.260 083 |
| 128 | 122 | 240 | white | 3 x 6 | 1 | 6.260 085 |
| 128 | 148 | 291 | white | 6 x 12 | 1 | 6.260 087 |
| 128 | 148 | 240 | white | 4 x 8 | 1 | 6.260 089 |

3



Cooling/Cryogenic boxes, racks



1 LLG-Cryogenic storage boxes, plastic coated, 136 x 136

NEW!

Freezer and cryogenic storage boxes (CryoBoxes). 136 x 136mm square. For the storage of samples. Made of cardboard, **plastic coated**. **With lid and divider**.

| Height mm | Length mm | Width mm | Colour | Array | PK | Cat. No. |
|--------------|--------------|-------------|--------|---------|----|-----------|
| 25 | 136 | 136 | white | 16 x 16 | 1 | 6.260 052 |
| 25 | 136 | 136 | blue | 16 x 16 | 1 | 6.260 053 |
| 25 | 136 | 136 | green | 16 x 16 | 1 | 6.260 054 |
| 32 | 136 | 136 | white | 13 x 13 | 1 | 6.260 058 |
| 32 | 136 | 136 | blue | 13 x 13 | 1 | 6.260 059 |
| 32 | 136 | 136 | green | 13 x 13 | 1 | 6.260 060 |
| 50 | 136 | 136 | white | 10 x 10 | 1 | 6.260 064 |
| 50 | 136 | 136 | blue | 10 x 10 | 1 | 6.260 065 |
| 50 | 136 | 136 | green | 10 x 10 | 1 | 6.260 066 |
| 50 | 140 | 140 | white | 10 x 10 | 1 | 6.260 068 |
| 50 | 140 | 140 | red | 10 x 10 | 1 | 6.260 069 |
| 50 | 140 | 140 | green | 10 x 10 | 1 | 6.260 070 |
| 50 | 136 | 268 | white | 10 x 20 | 1 | 6.260 071 |
| 50 | 136 | 268 | blue | 10 x 20 | 1 | 6.260 072 |
| 50 | 136 | 268 | red | 10 x 20 | 1 | 6.260 073 |
| 50 | 136 | 268 | green | 10 x 20 | 1 | 6.260 074 |
| 128 | 122 | 122 | white | 5 x 5 | 1 | 6.260 076 |
| 128 | 122 | 122 | white | 3 x 3 | 1 | 6.260 078 |
| 128 | 148 | 148 | white | 6 x 6 | 1 | 6.260 080 |
| 128 | 148 | 148 | white | 4 x 4 | 1 | 6.260 082 |
| 128 | 122 | 240 | white | 5 x 10 | 1 | 6.260 084 |
| 128 | 122 | 240 | white | 3 x 6 | 1 | 6.260 086 |
| 128 | 148 | 291 | white | 6 x 12 | 1 | 6.260 088 |
| 128 | 148 | 291 | white | 4 x 8 | 1 | 6.260 090 |

Special sizes and colours available on request!



2 LLG-Cryogenic storage boxes

With 100 places, 10x10 grid and numerical coded. Robust hinge with safe snap-on lid, stackable for safe transport. Minimised liquid retention. Guaranteed metal free. Temperature resistant from -130°C to +90°C, autoclavable at 121°C, 20 minutes. Dimensions: 140 x 140 x 60mm

| Colour | PK | Cat. No. |
|---------------|----|-----------|
| Magenta/clear | 1 | 9.405 800 |
| Black | 1 | 9.405 801 |



3 Cryogenic storage boxes Arctic Square®, PC

NEW!

Safely store vials from -196 to +121°C for repeated use in mechanical freezers as well as liquid nitrogen. Boxes are designed with unique features to help the user orient, identify, and access vials with ease. The forward-sloped base and high-contrast, imprinted indexing on the transparent lid ensure quick visual orientation. Hinged lid allows easy one-handed access to samples. A built-in stop prevents the lid from swinging too far when the box is picked up by the lid, helping to prevent accidental spills. The 5 x 5 array box does not have hinged lid. All boxes include vent and drainage holes. Stackable. Autoclavable.

Heathrow Scientific

| Colour | For tubes | Array | Dimensions (W x D x H) mm | Figure | PK | Cat. No. |
|--------------------------|--------------|---------|---------------------------|--------|----|-----------|
| red | up to 2.0 ml | 5 x 5 | 76 x 76 x 53 | A | 1 | 9.405 911 |
| purple | up to 5.0 ml | 9 x 9 | 133 x 133 x 96 | C | 1 | 9.405 912 |
| red, blue, green, purple | up to 2.0 ml | 9 x 9 | 133 x 133 x 53 | B | 4 | 9.405 913 |
| blue | up to 2.0 ml | 10 x 10 | 133 x 133 x 53 | D | 1 | 9.405 910 |

7. Heating and cooling technology

Cooling/Cryogenic boxes, racks

1 CryoBox, PP

NEW!

Polypropylene. 9 x 9 array. Resist ultra-low storage temperatures from -90°C up to +121°C. Autoclavable. With grid numbers on the lid for reliable identification of individual samples. Box fits most stainless steel racks.

Type A: 133 x 133 x 52mm

Type B: 133 x 133 x 75mm

1



| Type | Colour | PK | Cat. No. |
|------|---------|----|-----------|
| A | natural | 1 | 9.405 890 |
| A | yellow | 1 | 9.405 892 |
| A | red | 1 | 9.405 894 |
| A | green | 1 | 9.405 896 |
| A | blue | 1 | 9.405 898 |
| A | black | 1 | 9.405 900 |
| B | natural | 1 | 9.405 891 |
| B | yellow | 1 | 9.405 893 |
| B | red | 1 | 9.405 895 |
| B | green | 1 | 9.405 897 |
| B | blue | 1 | 9.405 899 |
| B | black | 1 | 9.405 901 |

2 Cryoboxes, Type 5000, 5025, 5026, 5027, 5050, PC

Stable, autoclavable PC. With printed grid on lid for cryovials and similar tubes up to 13.5mm diameter. Temperature resistant from -196 to +121°C. With grid numbers for reliable identification of individual samples.

Nalgene

*Type 5050 is a plain box with transparent PC lid, without grid, used for storing tubes of various sizes. Supplied in packs as indicated.

| Type | For tubes ml | Width mm | Length mm | Height mm | Array | PK | Cat. No. |
|-------------------|--------------|----------|-----------|-----------|---------|----|-----------|
| SYSTEM 100™ 5000 | 1/1.5 | 133 | 133 | 52 | 10 x 10 | 1 | 9.400 927 |
| CryoBoxes™ 5025 | 1.2/2.0 | 76 | 76 | 52 | 5 x 5 | 1 | 9.400 946 |
| CryoBoxes™ 5026 | 1.2/2.0 | 133 | 133 | 52 | 9 x 9 | 1 | 9.400 947 |
| CryoBoxes™ 5027 | 5.0 | 133 | 133 | 95 | 9 x 9 | 1 | 9.400 948 |
| Storage Box 5050* | | 133 | 133 | 52 | 1 | 1 | 9.400 949 |



3



9.400 927

4 Cryo boxes, PP, 81 well

No. of cells 9 x 9 = 81 cryovials.

Tenak

| Type | Width mm | Depth mm | Height mm | PK | Cat. No. |
|---------|----------|----------|-----------|----|-----------|
| Blue | 130 | 130 | 50 | 1 | 9.698 708 |
| Green | 130 | 130 | 50 | 1 | 9.698 709 |
| Natural | 130 | 130 | 50 | 1 | 9.698 710 |
| Red | 130 | 130 | 50 | 1 | 9.698 711 |
| Yellow | 130 | 130 | 50 | 1 | 9.698 712 |

4



5 Cryogenic boxes, PP, 81 well

NEW!

Store 1.5 to 2.0ml microtubes under easy-open, friction-fit lid. Locate tubes is easily with moulded grid lines and a moulded reference point on the lid. Polypropylene box fits in standard freezer racks. Autoclavable. Dimensions: 130 x 130 x 47mm.

Heathrow Scientific

5



| Colour | PK | Cat. No. |
|-----------------------------------|----|-----------|
| natural | 1 | 9.193 983 |
| blue | 1 | 7.078 821 |
| green | 1 | 7.058 103 |
| pink | 1 | 7.058 102 |
| yellow | 1 | 7.078 822 |
| orange | 1 | 7.083 522 |
| blue, green, pink, yellow, orange | 5 | 9.193 984 |

Cooling/Cryogenic boxes, racks

1


1 Microtube Storage Boxes, 50-/100-Well, PP

Ideal for sample or case study storage. Compact storage box has angled front slot for easy access to tubes. Rugged, polypropylene box has durable three-point hinges, snapping clasp for secure closure, moulded grid lines on lid, imprinted coordinates on bottom of base and imprinted and raised coordinates on tube wells. Holds 1.5 to 2.0ml microtubes. Resist storage temperatures from -80°C up to +121°C. Autoclavable.

Heathrow Scientific

| no. of wells | Dimensions (L x W x H) mm | Colour | PK | Cat. No. |
|--------------|------------------------------|-------------------------------------|----|-----------|
| 50 | 141 x 92 x 56 | blue, green, purple, yellow, orange | 5 | 9.193 985 |
| 100 | 141 x 151 x 57 | natural | 1 | 6.206 710 |
| 100 | 141 x 151 x 57 | blue, green, purple, yellow, orange | 5 | 9.193 981 |

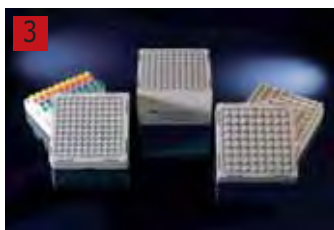
2


2 50-/100-Well cryogenic boxes, EPS

Inexpensive freezer storage. Lightweight 1.5 to 2.0ml microtube racks are ideal for long-term studies or tube storage. Two-piece racks are constructed of expanded polystyrene (EPS) foam. Extra spacing between wells allows easy gripping with fingertips. Racks stack securely with nesting features on lid and base. Resist storage temperatures from -80°C up to +70°C.

Heathrow Scientific

| no. of wells | Dimensions (L x W x H) mm | PK | Cat. No. |
|--------------|------------------------------|----|-----------|
| 50 | 210 x 100 x 71 | 1 | 9.193 987 |
| 100 | 336 x 95 x 73 | 1 | 9.193 986 |

3


3 MAX-100 CryoStore™ Boxes, PC

Durable polycarbonate storage boxes for CryoTubes™ available with different dividers for different tube sizes: 10 x 10 dividers for internally threaded tubes, 9 x 9 dividers for externally threaded tubes or tubes fitted with CryoFlex™ or 8 x 8 dividers for microcentrifuge tubes.

NEW!
Nunc

| Type | With | For tubes ml | Dimensions mm | PK | Cat. No. |
|--------------|-----------------|--------------|----------------|----|-----------|
| MAX-100 | 10 x 10 Divider | 1.0-1.8 | 132 x 132 x 52 | 1 | 7.626 792 |
| MegaMAX-100 | 10 x 10 Divider | 3.6 | 132 x 132 x 78 | 1 | 6.231 005 |
| MicroMAX-100 | 8 x 8 Divider | 1.5* | 132 x 132 x 52 | 1 | 6.201 224 |

* micro-centrifuge tubes.

4


4 LLG-Cryotubes, PP, sterile

PP. External screw thread or internal screw thread. Temperature resistant down to -196°C. DNase/RNase free. With marking area, fill line and graduations printed on the vial. Autoclavable at 121°C.

NEW!

| Capacity ml | Ext. dia. mm | Height mm | Description | PK | Cat. No. |
|-------------|--------------|-----------|--------------------------------|-----|-----------|
| 1.2 | 14.2 | 41.5 | external thread, self-standing | 100 | 9.401 060 |
| 1.2 | 12.3 | 42.4 | internal thread, self-standing | 100 | 9.401 061 |
| 2.0 | 14.2 | 48.0 | external thread, self-standing | 100 | 9.401 062 |
| 2.0 | 12.3 | 49.0 | internal thread, self-standing | 100 | 9.401 063 |
| 2.0 | 14.2 | 46.5 | external thread | 100 | 9.401 064 |
| 2.0 | 12.3 | 48.0 | internal thread | 100 | 9.401 065 |
| 5.0 | 14.2 | 88.9 | external thread, self-standing | 100 | 9.401 066 |
| 5.0 | 12.3 | 91.9 | internal thread | 100 | 9.401 067 |
| 5.0 | 12.3 | 91.0 | internal thread, self-standing | 100 | 9.401 068 |

Fits in 10 x 10 Cryobox System 100, Order No: 9.400 927

7. Heating and cooling technology

Cooling/Cryogenic boxes, racks

1 LLG-Insert cap disks for cryotubes, PP NEW!

Colour-coded cryovial cap inserts

| Colour | PK | Cat. No. |
|--------|------|-----------|
| blue | 1000 | 9.401 070 |
| white | 1000 | 9.401 071 |
| yellow | 1000 | 9.401 072 |
| pink | 1000 | 9.401 073 |
| red | 1000 | 9.401 074 |
| green | 1000 | 9.401 075 |



2 Cryovials System 100, Type 5000, PP

With PE-HD screw cap and silicone gasket. External screw thread. Self-standing. Increase storage capacity in mechanical and gaseous phase liquid nitrogen freezers. The gasket prevents leakage in microcentrifuges (up to 8000xg), or during transport. With writing area and graduations in white. Gamma radiation sterilized. One-handed operation possible. In compliance to CE. DNase/RNase free. Pyrogen-free and non-cytotoxic. Supplied in packs as indicated. Bar coded version available on request. Nalgene

| Type | Capacity | Ext. diam. | Height | PK | Cat. No. |
|------|----------|------------|--------|----|-----------|
| | ml | mm | mm | | |
| 5000 | 1.0 | 12 | 38 | 25 | 9.400 912 |
| 5000 | 1.5 | 12 | 48 | 25 | 9.400 913 |



3 Cryovials with screw cap, Type 5000, PP

PP with PE-HD screw cap. External screw thread. Self-standing. Temperature resistant down to -196°C. Gamma radiation sterilized. Non-cytotoxic and pyrogen-free. Compliance to Directive CE. DNase/RNase free. With marking area, fill line and graduations printed on the vial. Bar coded version available on request. Nalgene

| Type | Capacity | Ext. dia. | Height | PK | Cat. No. |
|------|----------|-----------|--------|----|-----------|
| | ml | mm | mm | | |
| 5000 | 1.2 | 13.5 | 38 | 25 | 9.400 941 |
| 5000 | 2.0 | 13.5 | 48 | 25 | 9.400 942 |
| 5000 | 5.0 | 13.5 | 92 | 10 | 9.400 943 |

Also available in a larger pack size (1000 pc.).



4 Cap coders for cryovials, Type 5445, PS

Coloured PS cap inserts. Nalgene

| Type | Colour | PK | Cat. No. |
|------|--------|-----|-----------|
| 5445 | white | 100 | 9.400 967 |
| 5445 | yellow | 100 | 9.400 968 |
| 5445 | blue | 100 | 9.400 969 |
| 5445 | green | 100 | 9.400 970 |
| 5445 | red | 100 | 9.400 971 |



5 Cryovial racks, Type 5030, PC

Autoclavable. Space-saving. Choice of sizes to hold 25 or 50 cryovials of 1.2, 2.0 or 5ml capacities. With moulded identification numbers and letters. One-handed operation possible. Nalgene

| Type | Aperture array qty. | Width | Length | Height | PK | Cat. No. |
|------|---------------------|-------|--------|--------|----|-----------|
| | | mm | mm | mm | | |
| 5030 | 5 x 10 | 102 | 197 | 28 | 1 | 9.400 944 |
| 5030 | 5 x 5, staggered | 102 | 197 | 22 | 1 | 9.400 958 |



Cooling/Cryogenic boxes, racks



1 2 CryoTubes™ with External Thread, PP/PE

NEW!

Intended for cryogenic transportation and storage of biological material. Available in three different tube types: Round or conical bottom shape with starfoot or round without foot (= non free standing). Conform to the IATA requirements for the transport of diagnostic specimens and to the US pharmacopoeia USP Class VI. Packed in resealable zip lock bags with printed catalog no. and lot. no. Non-pyrogenic. Non-toxic. Sterile (SAL 10⁻⁶). CE marked. Must be sealed in Nunc CryoFlex™ tubing for use in the liquid phase of liquid nitrogen (please see accessories).

Nunc

Material tubes: PP
Material screw caps: PE

| Capacity ml | Height mm | Ext. dia. mm | Description | PK | Cat. No. |
|----------------|--------------|-----------------|------------------------------------|------|------------------|
| 1.0 | 41 | 12.5 | Conical, starfoot and writing area | 500 | 6.078 305 |
| 1.8 | 48 | 12.5 | Round, starfoot and writing area | 450 | 6.054 658 |
| 4.5 | 91 | 12.5 | Round, starfoot and writing area | 300 | 6.302 247 |
| 1.0 | 41 | 12.5 | Conical, starfoot | 2000 | 4.009 087 |
| 1.8 | 48 | 12.5 | Round, starfoot | 450 | 6.803 016 |
| 4.5 | 91 | 12.5 | Round, starfoot | 1200 | 4.008 952 |
| 1.0 | 30 | 12.4 | Round, writing area* | 500 | 6.800 399 |
| 1.8 | 44 | 12.4 | Round, writing area* | 500 | 6.088 774 |

* Closure design does not permit the use of Cryo Color Coders (please see accessories).



3 4 CryoTubes™ with Internal Thread, PP

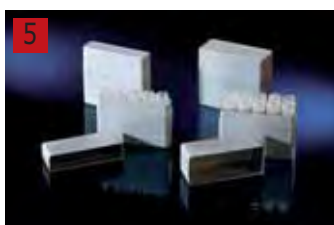
NEW!

Intended for cryogenic transportation and storage of biological material. Internal thread with a silicone gasket provides the best possible seal. Available in four different bottom shapes: Round with or without free standing and round or conical with starfoot. Conform to the IATA requirements for the transport of diagnostic specimens and to the US pharmacopoeia USP Class VI. Packed in resealable zip lock bags with printed catalog no. and lot. no. Non-pyrogenic. Non-toxic. Sterile (SAL 10⁻⁶). CE marked. Must be sealed in Nunc CryoFlex™ Tubing for use in the liquid phase of liquid nitrogen (please see accessories).

Nunc

Material tube and screw cap: PP

| Capacity ml | Height mm | Ext. dia. mm | Description | PK | Cat. No. |
|----------------|--------------|-----------------|---|-----|------------------|
| 1.8 | 48 | 12.5 | Round and writing area | 500 | 6.052 729 |
| 3.6 | 70 | 12.5 | Round and writing area | 400 | 7.607 431 |
| 4.5 | 92 | 12.5 | Round and writing area | 300 | 7.607 632 |
| 1.0 | 42 | 12.5 | Conical, free standing and writing area | 500 | 7.600 059 |
| 1.8 | 49 | 12.5 | Round, free standing and writing area | 450 | 6.800 228 |
| 1.0 | 42 | 12.5 | Conical, starfoot and writing area | 500 | 6.054 193 |
| 1.8 | 49 | 12.5 | Round, starfoot and writing area | 450 | 6.302 598 |
| 3.6 | 72 | 12.5 | Round, starfoot and writing area | 400 | 6.200 843 |
| 4.5 | 92 | 12.5 | Round, starfoot and writing area | 300 | 6.302 596 |



5 Miniboxes for CryoTubes™, PS

NEW!

Miniboxes made from High Impact Polystyrene (HIPS) are ideal for the transport of CryoTubes™. Available in two sizes.

Nunc

| For | PK | Cat. No. |
|-------------------------|-----|------------------|
| 5 CryoTubes™ 1.0-1.8ml | 350 | 9.390 600 |
| 10 CryoTubes™ 1.0-1.8ml | 200 | 9.390 601 |

7. Heating and cooling technology

Cooling/Cryogenic boxes, racks

1 CryoTubes™ Accessories, Cryo Color Coders NEW!

Use Nunc Cryo Color Coders as part of a versatile and comprehensive filing system. Fit all CryoTubes™ and are available in 10 different colours.

Nunc

| Colour | PK | Cat. No. |
|----------|------|-----------|
| Red | 500 | 7.079 568 |
| Orange | 2000 | 9.401 272 |
| Brown | 500 | 7.630 646 |
| White | 2000 | 9.401 274 |
| Blue | 2000 | 9.401 275 |
| Green | 2000 | 9.401 276 |
| Magenta | 500 | 6.204 811 |
| Yellow | 2000 | 9.401 278 |
| Purple | 2000 | 9.401 279 |
| Grey | 2000 | 9.401 280 |
| Assorted | 500 | 7.200 519 |



2 CryoTubes™ Accessories, CryoFlex™, PE NEW!

Provides extra safety when freezing hazardous samples or storing in liquid nitrogen. (CryoFlex shrinks upon heating thereby sealing the inserted CryoTube). Material: PE

Nunc

| Description | Dimensions mm | PK | Cat. No. |
|-------------|---------------|-----|-----------|
| CryoFlex™ | 500 x 14 | 300 | 4.009 142 |



3 Aluminum holder KryoCane™, Type 5015

For frozen storage of cryovials 1.2, 1.5 or 2.0ml.

Nalgene

| Type | For | Length mm | PK | Cat. No. |
|------|-------------|-----------|----|-----------|
| 5015 | 5 cryovials | 290 | 1 | 9.400 956 |
| 5015 | 6 cryovials | 300 | 12 | 9.400 935 |



4 Sleeve KryoSleeve™, Type 5016

Made of transparent PVC. For KryoCane™ aluminium vial holder.

Nalgene

| Type | Length mm | PK | Cat. No. |
|------|-----------|-----|-----------|
| 5016 | 273 | 100 | 9.400 957 |



5 Ice baths, polystyrene

Ice bath with non-slip, silicone feet. Fully insulated in light grey foam. Rigid body with support guide for aluminium insert blocks.

| Type | Internal tank dimensions (W x L x D) mm | PK | Cat. No. |
|--------|---|----|-----------|
| W-1060 | 140 x 210 x 70 | 1 | 9.010 670 |
| W-1061 | 210 x 350 x 100 | 1 | 9.010 671 |



Inserts for Ice baths

Solid aluminium.

| For | No. of vessels | PK | Cat. No. |
|--|----------------|----|-----------|
| 1.5 ml microtubes | 2 x 7 | 1 | 9.010 675 |
| 1.5 ml microtubes | 2 x 12 | 1 | 9.010 676 |
| Custom (please indicate drilling required when ordering) | | 1 | 9.010 677 |

Cooling/Cryogenic boxes, racks



1 Labtop Cooler, Type 5115, DS5116

The economical alternative for keeping samples and biochemical reagents cool at the workbench or for protecting against temperature fluctuations and power failure in refrigeration apparatus. With write-on, gridded lid. Lids fit one way to maintain the correct grid orientation. The lid of the Labtop Cooler jr. is transparent (12-position for tubes 1.5 to 2.0ml). The Labtop Cooler lid (32-position for tubes 1.5 to 2.0ml) is white and filled with a non-toxic insulation gel. Adapters are also supplied for 0.5ml microtubes. Robust, space-saving and stackable. With non-slip rubber feet. Can be used down to -135°C.

Nalgene

| Type | Description | Aperture array qty. | Description | Temperature-maintained on lab bench | PK | Cat. No. |
|--------|-------------------|------------------------|-------------|-------------------------------------|----|-----------|
| 5115 | Labtop-Cooler jr. | 12 | without gel | ≤-15°C up to 1 hr. | 1 | 9.400 929 |
| DS5116 | Labtop-Cooler jr. | 12 | without gel | ≤ 1°C up to 3.5 hrs. | 1 | 9.400 930 |
| 5115 | Labtop-Cooler | 32 | with gel | ≤-15°C up to 2 hrs. | 1 | 9.400 932 |
| DS5116 | Labtop-Cooler | 32 | with gel | ≤ 1°C up to 5 hrs. | 1 | 9.400 933 |



2 Freezing container Mr. Frosty Type 5100, PC

With 120mm diameter screw cap in blue PE-HD, vial holder made of white PE-HD. Suitable for 18 x 1.2/2.0ml cryovials. Foam interior. Cooling rate 1°C/min. Tubes can be easily removed. Each aperture has a moulded number for identification. Stackable.

Nalgene

| Type | Dia. mm | Height mm | For tubes ml | Qty. | PK | Cat. No. |
|------|------------|--------------|-----------------|------|----|-----------|
| 5115 | 117 | 86 | 1.0-2.0 | 18 | 1 | 9.400 945 |
| 5115 | 117 | 151 | 3.6 | 12 | 1 | 9.400 990 |
| 5115 | 117 | 151 | 4.5-5.0 | 12 | 1 | 9.400 991 |



3 Chilling Jar True North®

NEW!

Quickly freeze samples at -1°C per minute rate in freezer. Increase freezing rate by using isopropyl alcohol. Samples are not in contact with liquid.

Heathrow Scientific

When samples are removed from the freezer, the insulating foam holder decreases warming rate and extends working time.

Holds eight 1.2 to 2.0ml cryogenic vials. Dimensions (dia. x H): 123 x 105mm.

Supplied with:

Polycarbonate jar, polyethylene lid and insert and polyurethane foam holder.

| Type | PK | Cat. No. |
|--------------------------|----|-----------|
| Chilling Jar True North® | 1 | 9.010 690 |



4 Floating cryovial racks, Type 5974, PP

For 0.5 to 2.0ml test tubes and cryovials. Racks will float with a full load of filled tubes. With moulded identification numbers and letters.

Nalgene

| Type | Description | For tubes ml | Array | Colour | Dimensions (W x D x H) mm | PK | Cat. No. |
|------|-------------|-----------------|-------|--------|---------------------------|----|-----------|
| 5974 | Square | 0.5 | 4 x 4 | black | 103 x 103 x 65 | 1 | 9.400 981 |
| 5974 | Square | 1.0/1.2/1.5/2.0 | 4 x 4 | white | 103 x 103 x 65 | 1 | 9.400 982 |
| 5974 | Circular | 1.0/1.2/1.5/2.0 | 8 | white | 66 dia. | 4 | 9.400 983 |
| 5974 | Circular | 1.0/1.2/1.5/2.0 | 20 | white | 96 dia. | 4 | 9.400 984 |

7. Heating and cooling technology

Cooling/Cryogenic boxes, racks-Insulated containers

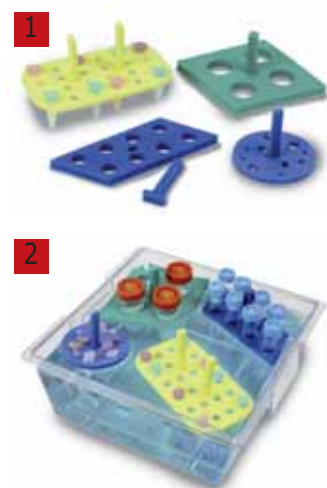
1 2 Floating Tube Racks, PE

NEW!

Polyethylene foam. Resist water absorption so racks can be washed and reused. Ideal for floating tubes in water baths, tubs, or beakers. Racks include detachable carrying handles, to easily lift samples out of baths.

Heathrow Scientific

| Type | For tubes ml | Array | Colour | PK | Cat. No. |
|---------------|------------------|-------|--------|----|-----------|
| Diamond | 50 | 4 | green | 5 | 6.238 546 |
| Parallelogram | 15 | 8 | blue | 5 | 6.238 547 |
| Rectangle | 1.5 to 2.0 | 24 | yellow | 5 | 6.238 545 |
| Round | 0.2/0.5/1.5 to 2 | 18 | blue | 5 | 6.240 378 |



3 Cool Containers True North®, PU

NEW!

Rigid polyurethane container provides durability for chilling your temperature sensitive samples. Excellent insulation properties for ultra cold. Use with ice, dry ice and ice-salt slurries, etc. For low temperature use down to -196°C. Minimize evaporation loss with close fit lid. Easily remove with comfortable recessed knobs. Keyed lid and base fit together to conveniently store lid under base. With spout and ergonomic handles for safe handling. Stackable.

Heathrow Scientific

| Capacity | Dimensions (L x W x H) | Colour | PK | Cat. No. |
|----------|------------------------|--------|----|-----------|
| litres | mm | | | |
| 4 | 234 x 181* | black | 1 | 9.010 691 |
| 1 | 267 x 195.5 x 114 | green | 1 | 9.010 692 |
| 4 | 381 x 254 x 182 | blue | 1 | 9.010 693 |
| 9 | 521 x 292 x 163 | red | 1 | 9.010 694 |

*(dia. x H)



4 Ice buckets, Spongex, PVC

Round, complete with lid.

schuett-biotec

For sample and reaction cooling. Foamed PVC. No styropor present. Unbreakable and lightweight. For use with ice/dry ice or liquid nitrogen. High temperature resistance -196°C to +93°C. Inert against acids, alkaline solutions, alcohol, acetone, phenol, etc.



| Type | Filling volume max. L | Capacity litres | Colour | Bottom dia. mm | Top dia. mm | Height mm | PK | Cat. No. |
|--------|-----------------------|-----------------|--------|----------------|-------------|-----------|----|-----------|
| Bucket | 4 | 5 | blue | 180 | 250 | 180 | 1 | 9.010 700 |
| Bucket | 4 | 5 | red | 180 | 250 | 180 | 1 | 9.010 720 |

Ice buckets, Spongex, accessory inserts

schuett-biotec

| Type | Colour | Height mm | PK | Cat. No. |
|------------------------------------|--------|-----------|----|-----------|
| For 44 x 1.5/2.0ml reaction tubes | blue | 10 | 1 | 9.010 711 |
| For 44 x 1.5/2.0ml reaction tubes | red | 10 | 1 | 9.010 726 |
| For 30 x 14/15ml Falcon-type tubes | blue | 17 | 1 | 9.010 713 |
| For 30 x 14/15ml Falcon-type tubes | red | 17 | 1 | 9.010 728 |

5 Ice storage containers, Labpan, PVC

schuett-biotec

| Type | Filling volume max. L | Colour | Width mm | Depth mm | Height mm | PK | Cat. No. |
|------|-----------------------|--------|----------|----------|-----------|----|-----------|
| Mini | 1 | blue | 130 | 130 | 80 | 1 | 9.010 703 |
| Mini | 1 | red | 130 | 130 | 80 | 1 | 9.010 723 |
| Midi | 4 | blue | 290 | 190 | 100 | 1 | 9.010 702 |
| Midi | 4 | red | 290 | 190 | 100 | 1 | 9.010 722 |
| Maxi | 9 | blue | 355 | 280 | 110 | 1 | 9.010 701 |
| Maxi | 9 | red | 355 | 280 | 110 | 1 | 9.010 721 |



Cooling/Insulated containers



1 Ice storage containers, Labpan, accessory inserts

schuett-biotec

| Type | Colour | Height mm | PK | Cat. No. |
|-------------------------------------|--------|-----------|----|------------------|
| For 36 x 1.5 / 2.0ml reaction tubes | blue | 10 | 1 | 9.010 761 |
| For 36 x 1.5 / 2.0ml reaction tubes | red | 10 | 1 | 9.010 762 |
| For 24 x 14/15ml Falcon-type tubes | blue | 17 | 1 | 9.010 764 |
| For 24 x 14/15ml Falcon-type tubes | red | 17 | 1 | 9.010 765 |



9.695 000

Cool packs Icecatch®

NEW!

Icecatch

Icecatch® cool packs for temperature sensitive products used in the pharmaceutical, biotech, medical and food industries. Icecatch cool packs distinguish itself through the following specific features:

- Reliable cold storage through the use of immobilised coolant
- For repeat usage due to the use of robust PA/PE film
- Disposal with the domestic trash due to the use of non-poisonous ingredients
- Unobjectionable use in the pharmaceutical and food industries
- Phase transition 0°C

Icecatch®-Gel

- Spreading of heat absorption around the 0°C range through the use of immobilised cooling gel
- Optimal price/heat absorption capacity relationship



9.695 007

Icecatch®-Solid

- Maximum dimensional stability during the freezing process through the use of hard foam

Icecatch®-Solid Isolated 2 - 8°C

- A perfect cool pack in combination with our System packaging for the +2°C up to +8°C transport
- Maximum dimensional stability during the freezing process through the use of hard foam, coolant and integrated isolation layer

| Type | Description | Weight g | Dimensions (W x D x H) mm | PK | Cat. No. |
|--------------------------|--|----------|---------------------------|-----|---------------------------|
| Icecatch®-Gel | with cooling gel | 90 | 90 x 110 x 20 | 120 | 9.695 000 2 |
| Icecatch®-Gel | with cooling gel | 170 | 90 x 150 x 20 | 80 | 9.695 001 |
| Icecatch®-Gel | with cooling gel | 230 | 90 x 180 x 20 | 60 | 9.695 002 |
| Icecatch®-Gel | with cooling gel | 460 | 140 x 190 x 30 | 32 | 9.695 003 |
| Icecatch®-Gel | with cooling gel | 690 | 140 x 240 x 40 | 24 | 9.695 004 |
| Icecatch®-Solid | with hard foam/cool medium | 850 | 105 x 230 x 35 | 15 | 9.695 005 |
| Icecatch®-Solid | with hard foam/cool medium | 1100 | 280 x 190 x 25 | 10 | 9.695 006 |
| Icecatch®-Solid Isolated | with hard foam/cool medium and isolation layer | 1100 | 280 x 190 x 30 | 10 | 9.695 007 3 |



9.695 020

System packaging Icecatch made of EPS

NEW!

Icecatch

This system solution, is a combination of a specific EPS Box and the cooling element "Icecatch Solid Isolated" (Cat-No. 9.695 007). It is the perfect medium for the transport of temperature sensitive products in the spectrum of +2°C up to +8°C.

In this solution there is no need of a combination of variably precondition cooling elements. By the use of an easily convertible packaging instruction the packaging process is simplified and wrong assembly is excluded.

- Easy handling, no „thawing“, no additional isolation material
- Modular system in terms of temperature an run time requirements
- Prequalified system solution consisting of the EPS Box and Icecatch Solid Isolated 2°C - 8°C
- Immediate availability



9.695 021

| Description | Dimensions (W x D x H) mm | Int. dimensions (W x D x H) mm | PK | Cat. No. |
|-------------------------|---------------------------|--------------------------------------|----|---------------------------|
| System packaging 15l/2l | 670 x 390 x 385 | 380 x 230 x 175 / 550 x 230 x 175 | 1 | 9.695 020 4 |
| System packaging 12.8l | 365 x 270 x 250 | 305 x 210 x 200 | 1 | 9.695 021 5 |

7. Heating and cooling technology

Cooling/Insulated containers

1 Dry ice machines SnowPack

Suitable for all European siphon carbon dioxide cylinders with valve (W 21.80 x 1¼" acc. to DIN 477, no. 6).

Bürkle

Applications: hospitals, universities, schools, laboratories, chemical industry, materials testing.
 Examples of use: lowering the temperature in cooling baths or cold traps, pre-cooling tissue samples, ensuring safe transport or embedding biological substances, freezing blood and tissue samples, studies in chemistry, physics and materials technology, etc.

- Produces dry ice tablets at -79°C
- operates without power
- taint and odour free

Gassing period (per tablet):

Tablets per 22kg bottle (dependent on ambient temperature and pressure):

either 0.5min. or 2.5min approx.
 either 90 or 16 pieces approx.



| Weight g | Dia. mm | Height mm | PK | Cat. No. |
|----------|---------|-----------|----|-----------|
| 50 | 50 | 30 | 1 | 9.253 006 |
| 250 | 80 | 60 | 1 | 9.253 008 |

2 Large insulating vessels

NEW!

DURAN®. DIN 12492. Cylindrical. With blue coated protective casing out of metal. With lid and handle.

KGW

| Capacity l | Int. dia. mm | Int. height mm | PK | Cat. No. |
|------------|--------------|----------------|----|-----------|
| 10 | 200 | 350 | 1 | 9.032 131 |
| 10 | 200 | 350 | 1 | 9.032 742 |
| 14 | 200 | 500 | 1 | 9.032 132 |
| 21 | 250 | 480 | 1 | 9.032 133 |
| 21 | 250 | 480 | 1 | 9.032 743 |
| 28* | 250 | 620 | 1 | 9.032 134 |
| 40* | 280 | 780 | 1 | 9.032 135 |

9.032 742 and 9.032 743: structured aluminium casing.

* Linen bag included.



3 Linen bag for large insulated vessels

NEW!

KGW

| Capacity l | PK | Cat. No. |
|------------|----|-----------|
| 10 | 1 | 9.032 231 |
| 14 | 1 | 9.032 232 |
| 21 | 1 | 9.032 233 |
| 28 | 1 | 9.032 234 |
| 40 | 1 | 9.032 235 |



Cooling/Insulated containers



1 Dewar carrying flasks

DURAN®. DIN 12492. Cylindrical. Type 26 B to 29 B: With blue coated protective casing out of metal. With lid and aluminium carrying handle.

KGW

| Type | Capacity L | Int. dia. mm | Int. height mm | PK | Cat. No. |
|------|---------------|-----------------|-------------------|----|-----------|
| 26 B | 1 | 100 | 150 | 1 | 9.032 726 |
| 27 B | 2 | 138 | 170 | 1 | 9.032 727 |
| 28 B | 3 | 138 | 230 | 1 | 9.032 728 |
| 29 B | 4 | 138 | 310 | 1 | 9.032 729 |

BE Type: Stainless steel casings, type 26 BE to 29 BE are available on request.



2 Dewar flasks, Type 4150, PE-HD

With vented, insulating PE-HD lid. PE covered handle. Unbreakable and completely safe for short term storage of ice water, dry ice solvents and liquid nitrogen. Also suitable for use as warming baths. Chemical-resistant, reinforced walls, filled with urethane foam, are temperature resistant from -196 to +100°C. 1, 2 and 4 litre flasks have a carrying handle.

Nalgene

| Type | Capacity L | Top dia. mm | Int. height mm | PK | Cat. No. |
|------|---------------|----------------|-------------------|----|-----------|
| 4150 | 1 | 95 | 194 | 1 | 9.031 961 |
| 4150 | 2 | 121 | 225 | 1 | 9.031 962 |
| 4150 | 4 | 146 | 287 | 1 | 9.031 964 |
| 4150 | 10 | 197 | 394 | 1 | 9.031 970 |



3 Dewar flasks, shallow form

DURAN®. DIN 12492. Dish-shaped. Generally for thermostating round bottom flasks to a constant temperature as hot or cold baths. With structured aluminium casing and edge protection. Suitable for use with magnetic stirrers.

KGW

| Capacity ml | Int. dia. mm | Height mm | PK | Cat. No. |
|----------------|-----------------|--------------|----|-----------|
| 260 | 100 | 65 | 1 | 9.032 423 |
| 400 | 110 | 70 | 1 | 9.032 425 |
| 680 | 138 | 80 | 1 | 9.032 426 |
| 1600 | 170 | 110 | 1 | 9.032 427 |



4 Dewar flasks, cylindrical

DURAN®. DIN 12492. Cylindrical. With blue coated protective casing out of metal. All vessels can also be supplied without casing, unsilvered or silvered with opposite viewing strips.

KGW

| Capacity ml | Int. dia. mm | Ext. diam. mm | Int. height mm | PK | Cat. No. |
|----------------|-----------------|------------------|-------------------|----|-----------|
| 100 | 40 | 56 | 90 | 1 | 9.032 011 |
| 200 | 40 | 56 | 170 | 1 | 9.032 012 |
| 300 | 47 | 60 | 190 | 1 | 9.032 013 |
| 500 | 57 | 70 | 210 | 1 | 9.032 015 |
| 800 | 67 | 80 | 240 | 1 | 9.032 018 |
| 1200 | 67 | 80 | 350 | 1 | 9.032 019 |
| 1000 | 77 | 95 | 235 | 1 | 9.032 021 |
| 1500 | 77 | 95 | 345 | 1 | 9.032 022 |
| 1500 | 90 | 115 | 245 | 1 | 9.032 024 |
| 2000 | 90 | 115 | 340 | 1 | 9.032 025 |
| 1500 | 100 | 120 | 240 | 1 | 9.032 027 |
| 2000 | 100 | 120 | 290 | 1 | 9.032 028 |
| 2500 | 110 | 130 | 290 | 1 | 9.032 030 |
| 4000 | 138 | 160 | 310 | 1 | 9.032 033 |



5 Chrome steel Dewar flasks

Nickel chromium steel, unbreakable, open top. With high-vacuum, permanent insulation. Temperature range -269 to +300°C. 5 year insulation guarantee.

| Capacity L | Int. dia. mm | Ext. diam. mm | Int. height mm | PK | Cat. No. |
|---------------|-----------------|------------------|-------------------|----|-----------|
| 1 | 85 | 107 | 206 | 1 | 9.031 982 |
| 1 | 100 | 122 | 157 | 1 | 9.031 983 |
| 2 | 100 | 122 | 285 | 1 | 9.031 984 |

Lid in cork for chrome steel Dewar flasks

Cork.

| For | PK | Cat. No. |
|-------------------------|----|-----------|
| 9.031 982 | 1 | 9.031 972 |
| 9.031 983 and 9.031 984 | 1 | 9.031 973 |

1 Dewar flasks, spherical

DURAN®. DIN 12492. Spherical. Brushed aluminium casing with insulating lid and carrying handle. KGW

| Capacity | Neck dia. | Ext. diam. | PK | Cat. No. |
|----------|-----------|------------|----|-----------|
| L | mm | mm | | |
| 1 | 30 | 175 | 1 | 9.032 740 |
| 3 | 60 | 225 | 1 | 9.032 741 |
| 5 | 60 | 260 | 1 | 9.032 115 |
| 10 | 65 | 330 | 1 | 9.032 127 |



2 Transportable stainless steel tank CRYOROLL 230 R NEW!

For Liquid Nitrogen. Cryo Diffusion proposes a new vertical LN2 tank, built out of non magnetic stainless steel. The CRYOROLL 230 R tank is particularly designed to be used in laboratories. This tank is in conformity with the European directive DESPT 99/36 (TPED). Cryo Diffusion

Specifications

| | |
|--------------------------------------|---------------------|
| Total capacity | 234L |
| Useful capacity | 222L |
| Maximum working pressure | 3.9bar |
| Dimensions (H x O. dia.): | 1354 x 670mm |
| Tare: | 146kg |
| Gross weight LN2; LO2; LAr: | 326kg; 400kg; 457kg |
| Loss rate (% per day) LN2; LO2; LAr: | 1.6; 1.2; 1.2 |
| Handling: | 5 castors |

| Type | PK | Cat. No. |
|----------------|----|-----------|
| CRYOROLL 230 R | 1 | 9.524 592 |



3 4 Cryogenic storage tanks, LO 2000 series with drawers NEW!

The LO 2000 series is specially developed for the storing of 4000(*), 8000(*) and 9600(*) cryo vials (*in liquid phase) (max. 2ml vials, 5ml vials on request) in cryo boxes. The large opening of 410mm (LO 2075) resp. 590mm gives easy access to the samples. The lightweight aluminium design and low space requirements of these containers make them the most economical units in their class. Supplied with drawer fastener. Cryo Diffusion

Features:

- large neck openings
- easy access to stored samples
- long Nitrogen retention times
- 2 Year warranty

The storage tanks LO 2000 series are also available for gas phase and dry storage (please see detailed image).

Accessories available on request: cryo boxes, castors, liquid level measuring rod, low filling level alarm, electronic filling level regulation and storage inserts for dry storage.



| Type | Capacity | No. of vials | No. of boxes | No. of racks | Static holding time | Description | PK | Cat. No. |
|-----------|----------|--------------|--------------|--------------|---------------------|-----------------------|----|-----------|
| | L | | | | | | | |
| LO 2075 M | 75 | 4000 | 10 | 4 | 30 | without electronics | 1 | 9.524 500 |
| LO 2200 M | 198 | 8000 | 10 | 8 | 40 | without electronics | 1 | 9.524 501 |
| LO 2250 M | 236 | 9600 | 12 | 8 | 47 | without electronics | 1 | 9.524 502 |
| LO 2075 M | 75 | 4000 | 10 | 4 | 30 | with S170 electronics | 1 | 9.524 559 |
| LO 2200 M | 198 | 8000 | 10 | 8 | 40 | with S170 electronics | 1 | 9.524 560 |
| LO 2250 M | 236 | 9600 | 12 | 8 | 47 | with S170 electronics | 1 | 9.524 561 |



1 Vapour Shipper containers BS 2000 series

Vapour Shipper containers BS 2000 series are designed for the safe transportation of biological samples at cryogenic (-150°C or colder) temperatures.

Cryo Diffusion

Fabricated from durable, lightweight aluminum, they employ a hydrophobic absorbent that contains the liquid nitrogen for "spill free" shipping. The absorbent also repels moisture and humidity, assuring the maximum holding time. This eliminates the necessity to dry units between uses.

A protective shipping case is available for all models. These containers may be used to ship your samples with a "non-hazardous" classification e.g. straws, cryo ampoules, bloodbags, thus reducing costs and helping to assure sample viability.

Available accessories on request: protective shipping case, temperature logger, holders for ampoules and blood bags.

| Type | Capacity | No. of vials | No. of straws | Static holding time | Neck dia. | Weight empty / full | PK | Cat. No. |
|---------|----------|--------------|---------------|---------------------|-----------|---------------------|----|-----------|
| | L | 2ml | 0.25ml | Days | mm | kg | | |
| BS 2002 | 2.00 | | 190 | 23 | 35 | 3.3/4.8 | 1 | 9.524 503 |
| BS 2004 | 5.20 | 114 | 1640 | 19 | 70 | 6.9/9.6 | 1 | 9.524 504 |
| BS 2024 | 24.00 | 798 | 17220 | 11 | 215 | 15.6/22.6 | 1 | 9.524 505 |

Cryogenic storage tanks, B 2000 series

The B 2000 series is especially developed for storing of straws and cryo vials in ampoule holders.

Cryo Diffusion

The B 2000 series offers capacities of 216 to 1332 cryo ampoules with 2ml and 474 to 16400 x 0.25ml straws.

The B 2000 series long term storage tanks are especially suited to hold small amounts of samples. Thanks to the small neck openings these storage tanks have holding times reaching 365 days. Supplied with canisters.

Accessories on request include: Canes for cryovials, rolling castors base, liquid level measuring rod, low filling level alarm.



2 Long term cryogenic storage tanks, B 2000 series

Cryo Diffusion

| Type | Capacity | No. of vials | No. of straws | No. of canisters | Static holding time | Chamber dimensions (Dia. x H) | PK | Cat. No. |
|---------|----------|--------------|---------------|------------------|---------------------|-------------------------------|----|-----------|
| | L | 2ml | 0.25ml | Days | mm | | | |
| B 2002M | 2.00 | | 474 | 3 | 25 | 26x110 | 1 | 9.524 506 |
| B 2003M | 4.10 | | 1560 | 6 | 42 | 37x110 | 1 | 9.524 507 |
| B 2009M | 10.50 | | 1560 | 6 | 93 | 37x110 | 1 | 9.524 508 |
| B 2011M | 12.00 | 216 | 2700 | 6 | 133 | 37x270 | 1 | 9.524 509 |
| B 2020M | 21.70 | 216 | 2700 | 6 | 238 | 37x270 | 1 | 9.524 510 |
| B 2020M | 21.70 | 216 | 1560 | 6 | 238 | 37x110 | 1 | 9.524 511 |
| B 2036M | 35.90 | 216 | 2700 | 6 | 365 | 37x270 | 1 | 9.524 512 |
| B 2036M | 35.90 | 216 | 1560 | 6 | 365 | 37x110 | 1 | 9.524 513 |



3 Large capacity cryogenic storage tanks, B 2000 series

Cryo Diffusion

| Type | Capacity | No. of vials | No. of straws | No. of canisters | Static holding time | Chamber dimensions (Dia. x H) | PK | Cat. No. |
|-----------|----------|--------------|---------------|------------------|---------------------|-------------------------------|----|-----------|
| | L | 2ml | 0.25ml | Days | mm | | | |
| B 2013-6 | 13.00 | | 4920 | 6 | 59 | 66x110 | 1 | 9.524 514 |
| B 2013-10 | 13.00 | | 4920 | 10 | 59 | 44x110 | 1 | 9.524 515 |
| B 2026 | 26.00 | | 8200 | 10 | 104 | 66x110 | 1 | 9.524 516 |
| B 2035 | 35.90 | 684 | 9840 | 6 | 211 | 66x270 | 1 | 9.524 517 |
| B 2048-6 | 48.50 | 1332 | | 6 | 180 | 94x270 | 1 | 9.524 518 |
| B 2048-10 | 48.50 | 1332 | 16400 | 10 | 180 | 73x270 | 1 | 9.524 519 |

1 Cryogenic storage tanks, BR 2000 series with drawers

The BR 2000 series is especially developed for storing 750, 3000, 4800 and 6000 cryogenic vials (max. 2ml vials, 5ml vials on request) in cryo boxes. Low vaporization thanks to their 215mm dia. neck (BR 2048: only 120mm). The lightweight, aluminium design and low space requirements of these containers make them the most economical units in their class. Supplied with drawer fastener.

Cryo Diffusion



Features:

- large neck openings
- easy access to stored samples
- long Nitrogen retention times
- lightweight aluminium design
- 2 Year warranty

Available accessories on request: cryogenic boxes, castors, liquid level measuring rod, low filling level alarm, electronic filling level regulation.

| Type | Capacity | | No. of boxes | No. of racks | Static holding time Days | PK | Cat. No. |
|---------|----------|------|--------------|--------------|--------------------------|----|-----------|
| | L | 2ml | | | | | |
| BR 2048 | 48 | 750 | 5 | 6 | 180 | 1 | 9.524 520 |
| BR 2100 | 100 | 3000 | 5 | 6 | 155 | 1 | 9.524 521 |
| BR 2150 | 148 | 4800 | 8 | 6 | 227 | 1 | 9.524 522 |
| BR 2200 | 197 | 6000 | 10 | 6 | 303 | 1 | 9.524 523 |

2 Cryogenic liquid dewars L 2000 series

The L 2000 Series of cryogenic liquid dewars are so-called because of their universal acceptance in laboratories and medical facilities worldwide. These high-efficiency, super-insulated dewars are the most convenient, economical way to store and dispense liquid nitrogen. Types L 2025, L 2035, L 2050 and L 2100 can be fitted with pressurized dispensing devices to aid in the transfer of liquid nitrogen.

Cryo Diffusion



Accessories on request include: Transfer hose, phase separator, spare corks, pressurized dispensing device, liquid level measuring rod, rolling castor base

| Type | Capacity | Evaporation rate L/ day | Neck dia. mm | Weight empty / full kg | Height mm | PK | Cat. No. |
|--------|----------|-------------------------|--------------|------------------------|-----------|----|-----------|
| | L | | | | | | |
| L 2002 | 2.0 | 0.08 | 35 | 2.7/4.3 | 402 | 1 | 9.524 524 |
| L 2005 | 5.5 | 0.13 | 50 | 4.4/8.8 | 494 | 1 | 9.524 525 |
| L 2012 | 12.4 | 0.14 | 50 | 8.1/18.1 | 600 | 1 | 9.524 526 |
| L 2025 | 25.0 | 0.2 | 50 | 10/31 | 684 | 1 | 9.524 527 |
| L 2035 | 35.0 | 0.25 | 50 | 13/41.5 | 591 | 1 | 9.524 528 |
| L 2050 | 50.0 | 0.3 | 50 | 17/57.5 | 675 | 1 | 9.524 529 |
| L 2100 | 100.0 | 0.8 | 50 | 32/113 | 1035 | 1 | 9.524 530 |

Castors for cryogenic liquid dewars

NEW!

With 5 castors and 2 brakes.

Cryo Diffusion

| For | PK | Cat. No. |
|--|----|-----------|
| B 2048, BR 2048, L 2035, L 2050, L 2100, LO 2075 | 1 | 9.524 531 |
| BR 2100, BR 2150, LO 2200, LO 2250 | 1 | 9.524 532 |



9.524 531



9.524 532

Cooling/LN2 Technology



1 Canisters for straws for LO 2000 series cryogenic dewars

NEW!

For Storage of straws in goblets. With goblet lifter. Diameter 70mm.

Cryo Diffusion

For a complete storage in canisters, 26 canisters are required for LO 2075 and 56 canisters for LO 2200 and LO 2250.

| For | Material | Height mm | Description | PK | Cat. No. |
|------------------|-----------------|-----------|----------------|----|-----------|
| LO 2200, LO 2075 | plastic | 515 | 4 straw levels | 1 | 9.524 562 |
| LO 2200, LO 2075 | stainless steel | 525 | 4 straw levels | 1 | 9.524 563 |
| LO 2250 | plastic | 650 | 5 straw levels | 1 | 9.524 568 |
| LO 2250 | stainless steel | 680 | 5 straw levels | 1 | 9.524 569 |



2 Triangular racks for LO 2000 series cryogenic dewars

NEW!

Triangular system of 6 plastic or 6 aluminium racks with drawers and plastic dividers.

Cryo Diffusion

| Description | Material | For | PK | Cat. No. |
|----------------------------|----------|---------------------------|----|-----------|
| System with 9 layers | plastic | LO 2075 | 1 | 9.524 564 |
| System with 11 layers | aluminum | LO 2200 | 1 | 9.524 567 |
| Plastic discs, dia. 12.7mm | aluminum | LO 2200, LO 2250, LO 2075 | 1 | 9.524 565 |



3 Square racks for cryogenic liquid dewars

NEW!

Aluminum.

Cryo Diffusion

| Description | For | PK | Cat. No. |
|---------------------------------------|------------------|----|-----------|
| Complete system of 4 racks, 10 levels | LO 2075 | 1 | 9.524 572 |
| Complete system of 8 racks, 10 levels | LO 2200 | 1 | 9.524 573 |
| Complete system of 8 racks, 12 levels | LO 2250 | 1 | 9.524 574 |
| Single rack of 10 levels | LO 2075, LO 2200 | 1 | 9.524 566 |
| Single rack of 12 levels | LO 2250 | 1 | 9.524 571 |

7. Heating and cooling technology

Cooling/LN2 Technology

1 Plastic goblets for cryogenic dewars **NEW!**

Cryo Diffusion

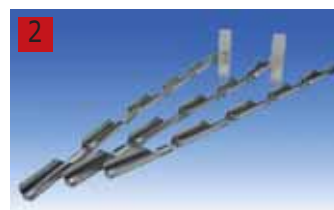
| Description | PK | Cat. No. |
|-------------------------|----|-----------|
| dia. 35mm, height 118mm | 1 | 9.524 533 |
| dia. 65mm, height 118mm | 1 | 9.524 534 |
| Cup "Marguerite" | 1 | 9.524 535 |



2 Ampoule holders for cryogenic liquid dewars **NEW!**

Cryo Diffusion

| For vials | Dia. mm | Height mm | PK | Cat. No. |
|-----------|---------|-----------|----|-----------|
| 6 | 11 | 45 | 1 | 9.524 536 |
| 6 | 12 | 45 | 1 | 9.524 537 |
| 5 | 12 | 55 | 1 | 9.524 538 |
| 2 | 12 | 75 | 1 | 9.524 539 |



3 Canisters, stainless steel for cryogenic dewars **NEW!**

Cryo Diffusion

| Dia. mm | Height mm | For | PK | Cat. No. |
|---------|-----------|-----------|----|-----------|
| 30 | 120 | BS 2002 | 1 | 9.524 540 |
| 66 | 270 | BS 2004 | 1 | 9.524 541 |
| 26 | 110 | B 2002 | 1 | 9.524 542 |
| 37 | 110 | B 2003 | 1 | 9.524 543 |
| 37 | 110 | B 2009 | 1 | 9.524 544 |
| 37 | 110 | B 2011 | 1 | 9.524 547 |
| 66 | 110 | B 2013/6 | 1 | 9.524 548 |
| 44 | 110 | B 2013/10 | 1 | 9.524 549 |
| 37 | 270 | B 2020** | 1 | 9.524 550 |
| 37 | 110 | B 2020* | 1 | 9.524 551 |
| 66 | 110 | B 2026 | 1 | 9.524 552 |
| 66 | 270 | B 2035 | 1 | 9.524 553 |
| 94 | 270 | B 2048/6 | 1 | 9.524 554 |
| 73 | 270 | B 2048/10 | 1 | 9.524 555 |

* one level
**two levels



4 Data logger for dry shipping container **NEW!**

Cryo Diffusion

With mounting device.

| For | PK | Cat. No. |
|----------|----|-----------|
| BS 2002M | 1 | 9.524 556 |
| BS 2004M | 1 | 9.524 557 |
| BS 2024M | 1 | 9.524 558 |



We can supply this
manufacturer's
 whole
product range !



1 CryoPlus LN2 Storage Systems

NEW!

Thermo Scientific

Our CryoPlus LN2 storage systems provide precise and accurate control over all parameters without complicated programming. Storage capacities of up to 38.500 vials (2.0mL) make the most of your laboratory storage space.

Microprocessor Control

- Precise liquid level control over 16 parameters; with autofill system
- Control panel is mounted on the top of the unit for convenient access and easy touchpad programming
- Digital temperature display sensor is located under the lid; this indicates the highest temperature reading inside the tank
- 24 tricolor LEDs continuously display actual liquid nitrogen level and high-level/ low-level setpoints
- Remote alarm contacts for in-house remote alarms or connection to a Sensaphone® Telephone Dialing System

Standard Accessories

- CryoPlus 1 model has 0.5" 45° flare, 4' (1.2m) flexible hose
- CryoPlus 2, 3 and 4 come with 0.5" 45° flare, 6' (1.8m) flexible hose

Optional Accessories

- A complete offering of racks including vertical, square and arrowhead options to maximize storage space
- Choose from cardboard, polycarbonate or stainless steel cryo boxes
- Sensaphone® Telephone Dialing System for added peace of mind

| Type | No. of vials | Capacity | External dimensions (W x D x H) mm | PK | Cat. No. |
|------------|--------------|----------|------------------------------------|----|-----------|
| CryoPlus 1 | 6318 | 90 l | 546 x 660 x 1041 | 1 | 4.009 319 |
| CryoPlus 2 | 13000 | 200 l | 724 x 1054 x 1041 | 1 | 4.009 320 |
| CryoPlus 3 | 24000 | 340 l | 876 x 1054 x 1041 | 1 | 4.009 321 |
| CryoPlus 4 | 38500 | 5522 l | 1105 x 1270 x 1194 | 1 | 4.009 322 |

1


1 CryoMed Controlled-Rate Freezers



Thermo Scientific



Our CryoMed freezers feature an integrated control system (consisting of freezing chamber, microprocessor control, and printer; all in one bench top unit), allowing multiple freezing profiles to be tailored to specific protocols. Freezer functionality is enhanced by a MS Windows®-based controlled-rate freezing interface software (included) that connects to your PC and external inkjet printer.

Easy Programming and Monitoring

- Chamber and sample temperatures and operation status are simultaneously displayed on a backlit LCD
- Chamber temperatures are monitored by a fixed-mount Type T thermocouple
- Sample temperature is monitored by Type T thermocouple with flexible cable (included)
- Pre-cool step automatically begins the temperature ramp when chamber and sample temperatures are equilibrated within 1°C
- Audible indicators alert operator when hold time has elapsed
- Continual operation if power outage lasts less than ten seconds; audible/visual alarm for outages lasting longer than ten seconds

Modifiable access code for added security

- Six standard preset profiles and 10 user defined profiles (20 steps each) for customer-created profiles are standard. (Unlimited user defined profiles when operating through a PC).

- Preset profiles, which are suggested starting points for freezing protocols, can be copied and pasted easily to create new profiles. New profiles can be edited and named to meet your specific freezing protocol requirements. LN2

Freezing System Components

- Intuitive control panel and integrated thermal printer
- Dual solenoid valves increase LN2 injection volume for precise temperature control and accelerated freezing for optimum cell viability
- Specifically designed air handling system and patented liquid nitrogen injection ring work in tandem for precise temperature control and uniformity
- Overtemperature protection for heating element
- Specific models designed for human IVF use (510(k) number K021042)
- IVF chambers allow convenient top access for manual sample "seeding" applications Construction
- Type 304 stainless-steel with exterior powder-coat finish
- Foamed in-place polyurethane insulation and Teflon® heat break minimizes cabinet condensation
- Bulb-style gaskets ensure tight door seal

| Type | Capacity litres | External dimensions (W x D x H) mm | Internal dimensions (W x D x H) mm | PK | Cat. No. |
|----------------|--------------------|--|--|----|-----------|
| CryoMed 17 | 17 | 805 x 787 x 538 | 178 x 330 x 305 | 1 | 4.009 323 |
| CryoMed 34 | 34 | 787 x 538 x 805 | 178 x 330 x 305 | 1 | 4.010 330 |
| CryoMed 48 | 48 | 958 x 787 x 538 | 330 x 330 x 305 | 1 | 4.009 324 |
| CryoMed 17 IVF | 17 | 805 x 787 x 538 | 178 x 330 x 305 | 1 | 4.009 325 |
| CryoMed 34 IVF | 34 | 805 x 787 x 538 | 178 x 330 x 305 | 1 | 4.009 326 |

2 Bio-Cane Canister and Cane Systems



Thermo Scientific



Bio-Cane Cane and Canister Systems cost-effectively store cell, tissues or other biological samples. Available in four sizes, the system can safely hold samples for up to seven months without replenishing LN2.

- With six stainless-steel canisters to accommodate vials (eight with Bio-Cane 70)
- Canisters are numbered and color-coded to simplify sample identification
- Durable aluminum construction and vacuum insulation
- Narrow-mouth design minimizes LN2 evaporation
- Secure locking clasp

| Type | Capacity | Top dia. | No. of canisters | Chamber dimensions (Dia. x H) mm | External dimensions (Ø x L) mm | PK | Cat. No. |
|------------|----------|----------|------------------|--|--------------------------------------|----|-----------|
| BioCane 20 | 20,5 l | 51 | 6 | 38 x 279 | 653 x 368 | 1 | 4.010 371 |
| BioCane 34 | 34,8 l | 88 | 6 | 71 x 279 | 676 x 462 | 1 | 4.010 372 |
| BioCane 47 | 47,4 l | 127 | 6 | 102 x 279 | 673 x 508 | 1 | 4.010 373 |
| BioCane 73 | 73,0 l | 152 | 8 | 127 x 279 | 559 x 693 | 1 | 4.010 374 |