



# Technical data sheet for Dewar flasks cylindrical out of glass type 00 to S 22 C or CAL

## Area of application

- ◆ laboratory technique
- ◆ medicinal technique
- ◆ Biotechnology
- ◆ storing and company internal short-distance transport
- ◆ for liquid or solid medias and solid matters (LN2 oder CO2)
- ◆ Pressure-less space for coolants

## Features of performance

- ◆ reliably and economically
- ◆ Dewar flasks according to DIN 12492
- ◆ glass material according to ISO 3585
- ◆ nominal capacity from 100ml to 8 litres
- ◆ protective casing out of blue-coated metal or aluminium



Dewar flask 9 C

## Description of complete flasks

### Types and accessories

- ◆ C = blue-coated protective casing out of metal
- ◆ CAL = protective casing out of stucco aluminium

### Temperature ranges

- ◆ glass refill from  $-200^{\circ}\text{C}$  to  $+150^{\circ}\text{C}$ ,  
for a short time  $200^{\circ}\text{C}$
- ◆ casing with mounting rubber and Latizell buffer  
from  $-10^{\circ}\text{C}$  to  $+60^{\circ}\text{C}$

### Pressure range

- ◆ pressure - less

## Description of glass Dewar flask

### Material

- ◆ borosilicate glass 3.3 ISO 3585

### Chemical characteristics

- ◆ hydrolytic resistance: according to ISO 719 ( $98^{\circ}\text{C}$ )
- ◆ hydrolytic resistance: according to ISO 720 ( $121^{\circ}\text{C}$ )
- ◆ acid resistance: according to ISO 1776
- ◆ alkaline resistance: according to ISO 695-A2

### Physical characteristics

- ◆ linear expansion coefficient:  $3,3 \times 10^{-6} 1/\text{K}$   
(in between  $20-300^{\circ}\text{C}$ )
- ◆ density:  $2,23 \text{ g/cm}^3$
- ◆ specific thermal capacity:  $910 \text{ J/kg K}$
- ◆ transformation temperature:  $525^{\circ}\text{C}$

### Vacuum

- ◆  $> 5 \times 10^{-6} \text{ mbar}$

### Silvering

- ◆ fully silvered

## KGW - ISOTHERM

Karlsruher Glastechnisches Werk  
76185 Karlsruhe Gablonzerstraße 6  
Tel: 0721 95897-0 Fax: 0721 95897-77  
E-Mail: info@KGW-ISOTHERM.COM  
Internet: www.KGW-ISOTHERM.COM



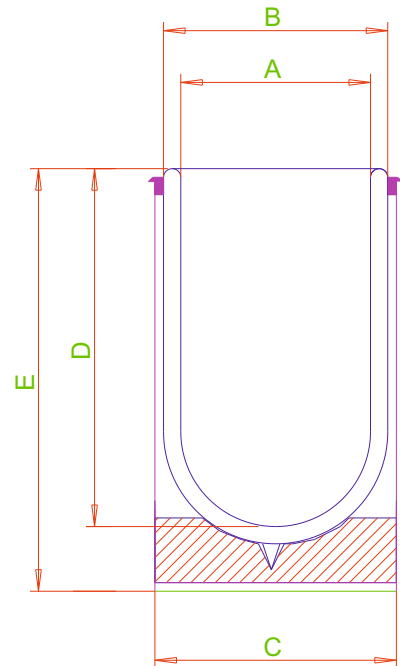
# Technical data sheet for Dewar flasks cylindrical out of glass type 00 to S 22 C or CAL

## Special types

- ◆ Dewar flasks with loosely lied-on plug for gaseous medias
- ◆ Dewar flasks with PE lid and spring clips
- ◆ Dewar flasks with opposite viewing strips in CAL-version only

## Safety advises and regulations

- ◆ always wear protective glasses and protective gloves
- ◆ national regulations for laboratories
- ◆ company- internal regulations
- ◆ safety regulations for handling with liquid gases



## Measurements and order data

### Dewar flasks cylindrical, technical specifications

Type	max.Content ca. [ ml ]	A mm	B mm	C mm	D mm	E mm	Weight ca. [ kg ]	Dewar Article No.	Plug Article No.
00 C	100	40	56	63	90	135	0,2	1021	1721
0 C	200	40	56	63	170	215	0,3	1022	1722
1 C	300	47	60	72	190	240	0,3	1023	1723
2 C	450	47	60	72	270	310	0,5	1024	1724
3 C	500	57	70	81	210	260	0,5	1025	1725
4 C	750	57	70	81	310	370	0,8	1026	1726
5 C	1250	57	70	81	500	550	1,3	1027	1727
6 C	800	67	80	90	240	295	0,6	1028	1728
7 C	1200	67	80	90	350	395	0,8	1029	1729
8 C	1700	67	80	90	500	560	1,1	10210	17210
9 C	1000	77	95	105	235	290	0,7	10211	17211
10 C	1500	77	95	105	345	395	1,1	10212	17212
11 C	2100	77	95	105	500	550	1,8	10213	17213
12 C	1500	90	115	124	245	300	1,1	10214	17214
13 C	2000	90	115	124	340	390	1,4	10215	17215
14 C	3200	90	115	124	600	665	2,5	10216	17216
15 C	1500	100	120	130	240	300	1,2	10217	17217
16 C	2000	100	120	130	290	345	1,4	10218	17218
17 C	4000	100	120	130	600	660	2,9	10219	17219
18 C	2500	110	130	140	290	345	1,7	10220	17220
19 C	5000	110	130	140	600	660	3,2	10221	17221
20 C	3000	138	160	165	230	280	1,4	10222	17222
S 21 C	4000	138	160	165	310	375	2,4	10223	17223
S 22 C	8000	138	160	165	600	660	4,6	10224	17224

### KGW - ISOTHERM

Karlsruher Glastechnisches Werk  
76185 Karlsruhe Gablonzerstraße 6  
Tel: 0721 95897-0 Fax: 0721 95897-77  
E-Mail: info@KGW-ISOTHERM.COM  
Internet: www.KGW-ISOTHERM.COM