



KAVALIER

PRODUCT DATA SHEET

457/23

Issuer's name/ producer:
Issuer's address/Producer:

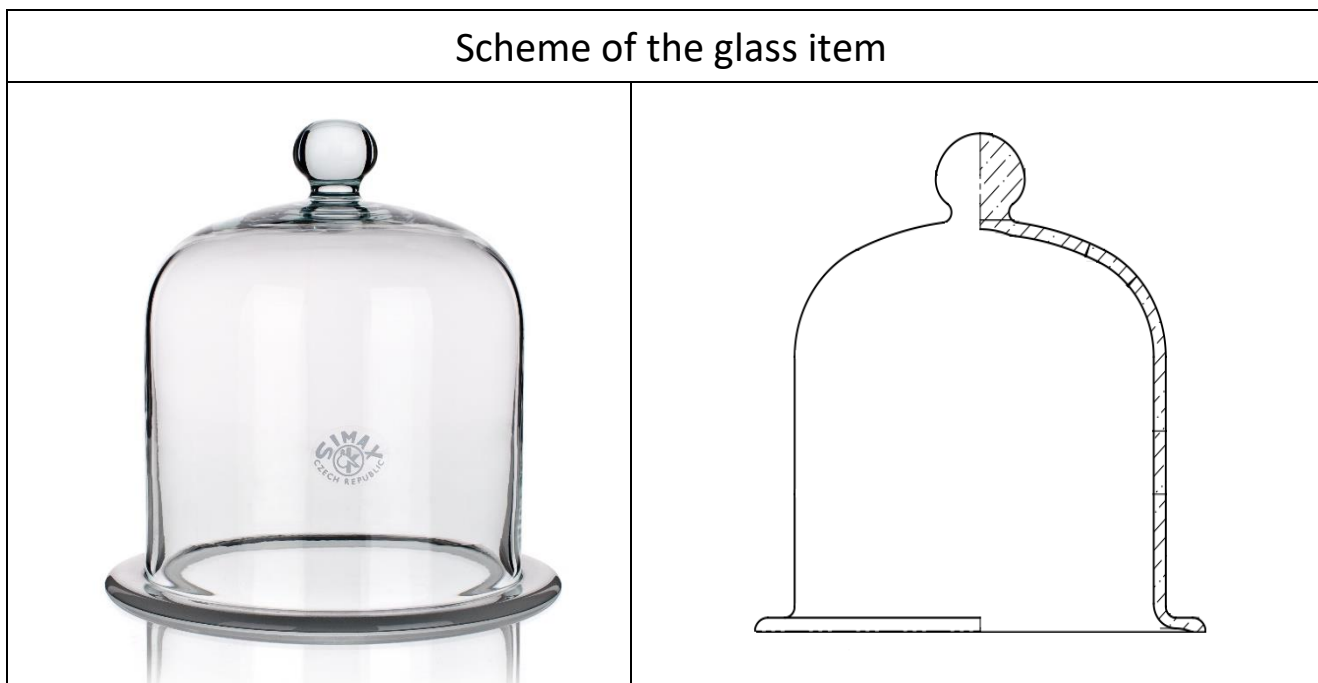
KAVALIERGLASS, a.s.
Křížová 1018/6, Prague 5
office: Sklářská 359, 285 06 Sázava, Czech Republic

Object of the declaration:

BELL JARS with ground flange and knob

Product IDN & Description	Catalog Nr.	d [mm]	h [mm]
2873 clear jars	1632415501152	150	150
	1632415501153	150	200
	1632415501154	150	250
	1632415501185	180	300
	1632415501203	200	200
	1632415501204	200	250
	1632415501205	200	300
	1632415501206	200	350
	1632415501307	300	400

Scheme of the glass item



Material specification:		
Bell Jar	clear	Borosilicate glass SIMAX®
Print on the body	white	in fired-on, chemically resistant ceramic decal
Purpose of use	Laboratory glassware Reusable Jar style Suitable for vacuum operations	

The object of the certificate described above is in conformity with the requirements of the following standards and regulations:

Glass characteristics:

- **ISO 3585** Borosilicate glass 3.3 – properties

- **Commission Regulation (EU) No. 2023/2006**

Good manufacturing practice for materials and articles intended to come into contact with food

- **Regulation EC No 1935/2004 of 27 October 2004**

Directive on materials and articles intended to come into contact with food and repealing Directives 80/590/EEC and 89/109/EEC

- **Regulation of Czech Health Ministry Decree No. 38/2001 Coll.**

Directive on articles intended to come into contact with foodstuffs

- **CSN 70 4309**

Laboratory glass – Thick-walled jars. General technical requirements.

- **Temperature resistance**

The recommended permissible temperature is 300 °C. This temperature may be exceeded for a short period.

- **Sterilization**

Hot air sterilization, in the oven	up to 140 °C
Steam sterilization, in an autoclave	121 °C/ 20 min/ 2,05 bar
	134 °C/ 10 min/ 3,04 bar

- **Vacuum rating**

1-atmosphere of vacuum

!!! WARNING!!! do not use with heat or pressure applications.

No heavy metals (lead, cadmium, mercury and hexavalent chromium):

- Regulation (EC) No. 987/2008 of 8 October 2008 amending Regulation (EC) No. 1907/2006 – REACH as regards Annexes IV and V – glass was exempted from the obligation to register.

- **Chemical characteristics of borosilicate glass (approximate values)**

Component	Content (percentage by weight)
SiO ₂	80,3%
B ₂ O ₃	13,0%
Al ₂ O ₃	2,4%
Na ₂ O + K ₂ O	4,3%

- **Chemical characteristics Borosilicate glass SIMAX® (acc. to Regulation No 1907/2006/EC):**

Composition:	CAS No.	EINECS No.	Component:	Concentration /Percent:
	65997-17-3	266-046-0	Glass, oxide, chemicals	100%

Characteristics of Borosilicate glass SIMAX®

Dossier of extractables and leachables studies:

- Acid resistance Class I. (to ISO 1776)
- Hydrolytic resistance Class I. (HGB1 to ISO 719; HGA1 to ISO 720)
- Acid resistance ISO 1776
- Resistance to attack by a boiling aqueous solution of mixed alkali Class A2 (to ISO 695)

- Coefficient of mean linear thermal expansion α : $3,3 \times 10^{-6} \text{ K}^{-1}$ (to ISO 7991; 20/300 °C)

- Pharmaceutical use

European Pharmacopoeia (EP)

US Pharmacopoeia (USP)

Japanese Pharmacopoeia (JP)

Eur. Ph.10th – 3.2.1

USP <660>

JP16

Supporting data:

TEST / European Pharmacopoeia 10 th , Art. 3.2.1	UNIT	LIMIT	RESULT
Hydrolytic resistance - inner surfaces, test A	ml 0,01 mol/l HCl/100ml of leachate	max 0,40	0,04
Hydrolytic resistance - glass grains, test B	mol 0,02/l HCl/g	max 0,1	0,038
Arsenic content	mg As/g	max 0,1	< 0,001

Additional information:

The producer confirms hereby that the characteristics, measures and accuracy of the products listed above are in full conformity with the provisions of the standard.

The producer also declares that the products are safe when used in usual and proper way.

The producer has installed the Quality Assurance System according to ISO 9001 and thus guarantees that all products delivered to the market are in full conformity with the technical documentation and with all fundamental requirements to such products.
Certificate No. 44 100 940602 issued by TÜV CERT, Certification Body at TÜV NORD CERT GmbH.

The certificate is issued for the customer: **AUXILAB S.L.**

Sázava, 27. 09. 2023
Place and date of issue

Ing. Kristýna Machová
Project Quality Engineer

CAVALIERGLASS, a.s.
Křížová 1018/6, 150 00 Praha 5
Office: Sklářská 359, 285 06 Sázava
Czech Republic
IČ: 474 68 815
-61-
