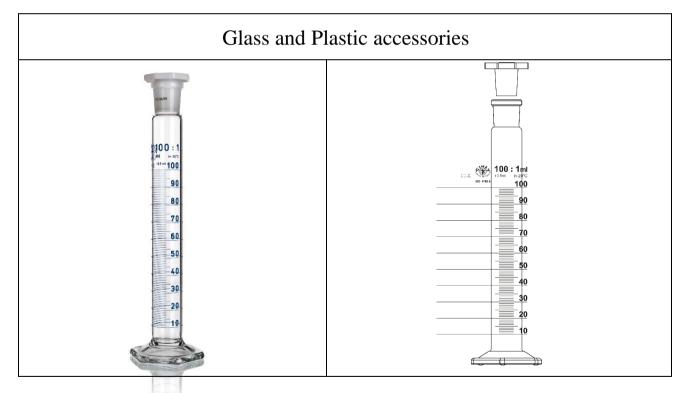
Issuer's name/producer: KAVALIERGLASS, a.s.

Issuer's address/Producer: Křížová 1018/6, Prague 5

office: Sklářská 359, 285 06 Sázava, Czech Republic

Object of the declaration: Cylinders graduated with SJ and plastic stopper, blue graduation, class A

Product IDN & Description	Catalog No.	Capacity/ ml
1652 AMPN	1632432630018 1632432630019 1632432630023 1632432630025 1632432630030 1632432630038 1632432630043 1632432630044 1632432630046	5 10 25 50 100 250 500 1000 2000
	1052 1520500 10	2000



Material specification:				
Cylinder graduated	clear	Borosilicate glass SIMAX®		
Print on the body of the cylinder	blue - PANTONE 2935U	in fired-on, chemically resistant ceramic enamel		
Print on the neck of the cylinder	green – PANTONE 349C	in fired-on, chemically resistant ceramic decal		
Stopper	white	PE-HD LITEN® MB 68		
	blue target in the middle	PE-LDPE BRALEN VA 20-60		
Purpose of use	laboratory volumetric glassware thinning of solutions, mixing of several component in given ratios			

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.
 - Chemical durability (art. 4.1, 4.2, 4.3, 4.4)
 - Physical properties (art. 5.1, 5.2, 5.3, 5.4, 5.5, 5.6)
- ISO 4788 Laboratory glassware Graduated measuring cylinders
 - Maximum permissible errors in capacity fulfill the values specified in Table 1/ISO 4788. These errors represent the maximum permissible error at any point on the scale.

Table 1 – ISO 4788

Class A, Certified Graduated Cylinder				
Nominal capacity [ml]	Accuracy limits [±ml]	Stopper size NS		
5	0,05	10/19		
10	0,01	10/19		
25	0,25	14/23		
50	0,50	19/26		
100	0,50	24/29		
250	1,00	29/32		
500	2,50	34/35		
1000	5,00	45/40		
2000	10,00	45/40		

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.
- Directive 2011/65/EC (RoHS II), amended by 2015/863/EC, on the restriction of the use of certain hazardous substances in electrical and electronic equipment, Annex II - extension of limitation regarding 4 additional substances.
- Directive 2012/19/EU of European Parliament and of the Council of 4th July 2012 on waste electrical and electronic equipment (WEEE)

Chemical characteristics (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®:

- Acid resistance Class I. (to ISO 1776)
- Hydrolytic resistance Class I. (HGB1 to ISO 719; HGA1 to ISO 720)
- Alkali resistance Class II. (to ISO 695)
- Coefficient of mean linear thermal expansion α: 3,3 x10⁻⁶ K⁻¹ (to ISO 7991; 20/300 °C)

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. 04 100 940602 issued by TÜV CERT, Certification Body at TÜV NORD CERT GmbH.

The certificate is issued for the customer: -

Sázava, 29. 01. 2021 Place and date of issue Ing. Kristýna Machová
Project Quality Engineer

