

b.safe

Data sheet b.safe Cap

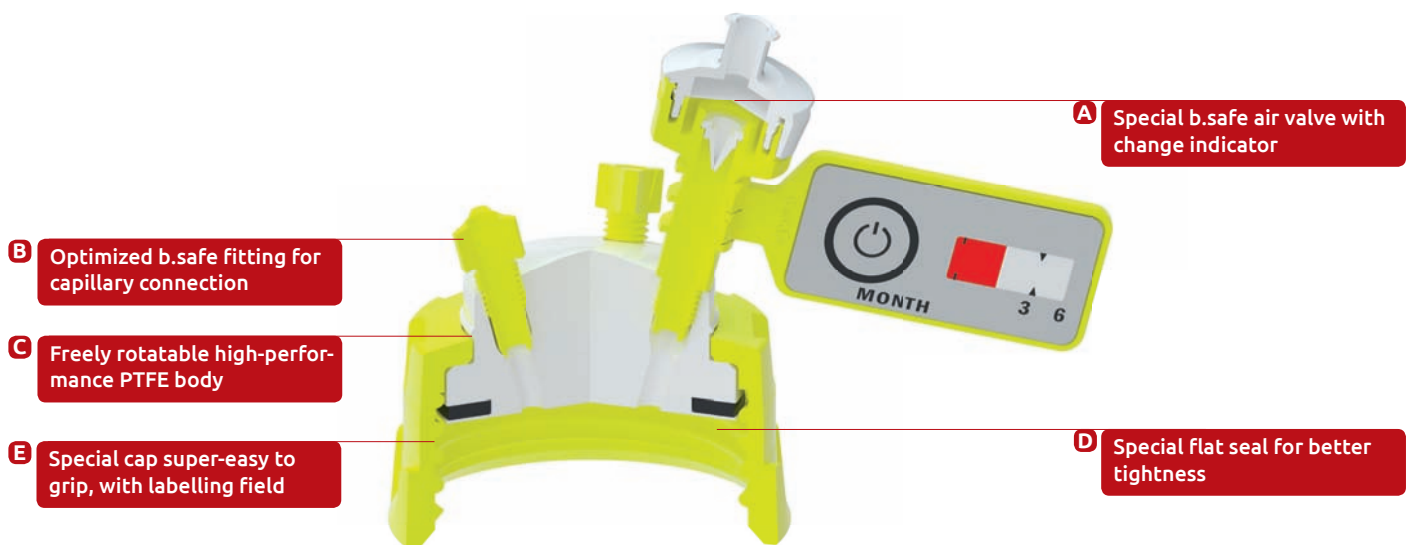


b.safe Cap

Screw cap made of PPS for GL 45 thread, free movable insert made of PTFE. With PFA Fittings for capillaries with O. D. 3,2 mm (thread UNF 1/4" 28G), blind fittings made of PFA to close unused connections and an Air Valve with service life indicator. Version and scope of delivery as per below chart.

Applications

Perfectly matched system for extraction of eluents. Tubing can be inserted onto the ground of the bottle by means of the b.safe Fittings made of PFA. The conical seal cone clamps the tubing and seals the connection safely. The b.safe Air Valve UHPLC is especially adapted to the flow rate in UHPLC. The integrated non-return valve avoids evaporation of solvents and lets flow ambient air into the bottle in case of vacuum. The upstream porous PTFE membrane restrains pollutant particles coarse and fine dust, as well as microorganisms carried by it and other contaminations from outside. The 6 months service life of the Air Valve can be easily monitored through either activating the display on the service life indicator and exchanging the valve in case of completely red colouring or documentation of the exchange date by hand and clip on the service life indicator at the valve. Mobile Phrase Caps are a practical and flexible closure option in laboratory supplies, which ensures efficient operation and optimal sealing.



A b.safe Air valve with change indicator

This item is included with all b.safe caps. Due to its large scale, you will find a separate product data sheet for the b.safe Air Valve UHPLC with change display here:
<https://www.bsafe.de/en/literature/product-data-sheets>

B b.safe Yellow fitting for capillary connection

This item is included with all b.safe Caps.

PFA

Properties	Value	Test standard
Colour	nature	-
Melting point	> 300 °C	ASTM D3418
Melt flow rate	24,0 to 37,0 g/10min	ASTM 3307
Specific weight	2,12 to 2,17	ASTM D792
Tensile strength	> 20,7 MPa	ASTM D638
Expansion	> 275 %	ASTM D638
Conformities	FDA RoHs REACH BSE/TSE	VO 10/2011/EU 2011/65/EU RoHS EC 1907/2006 1774/2002/EG

Color yellow

Properties	Value	Test standard
Colour	yellow	-
Melting point	255-280 °C	D3418
Melt flow rate	6 g/10min	D3159
Highest operating temperature	155 °C	UL746
Hardness	67 Shore D	D2240
Tensile strength	40 MPa	D638
Flame Rating	V-0	UL94
Arc resistance	122 sec	D495
Limitation of the oxygen index	30-32%	D2863
Conformities	RoHs REACH BSE/TSE	2011/65/EU RoHS EC 1907/2006 1774/2002/EG

b.safe High-performance PTFE body GL 45

Properties	Value	Test standard
Colour	white	-
Material	PTFE	-
Water content	0,02 %	-
Bulk density	500-800 g/l	ASTM D4894
Particle size	600-800 µm	-
Melting point	327±5 °C	ASTM D4894
Fluidity	12-16 s/100g	-
Usage temperature	to 260 °C	-
Sterilization	121 °C	-
Conformities	FDA RoHs Class VI	CFR 77.1380 2011/65/EU RoHS USP 35 (88)

b.safe Special flat seal

This item is included with all b.safe Caps.

Properties	Value	Test standard
Colour	black	-
Material	FKM	-
Temperature range	-10 - +230 °C	-
Hardness	70-80 SHA	Din ISO 7619-1
Density	1,85-2,05 g/cm ³	-
Tensile strength	9 MPa	DIN 53504
Elongation at break	165-235 %	DIN 53504
short-term peak temperature	275 °C	-
Flame Rating	V0	UL94
Acid resistance	very good	-
Alkali resistance	conditionally	
Conformities	FDA RoHs Class VI	CFR 77.1380 2011/65/EU RoHS USP 35 (88)

b.safe Special cap with labelling field GL 45

Properties	Value	Test standard
Material	PPS reinforced with 40% glass fiber	-
Density	1650 kg/m ³	ISO 1183
Bending stress	285 MPa	ISO 178
Rockwell hardness	100 M-Scale	ISO 2039-2
Melting temperature	280 °C	ISO 11357-1
Flammability	V-0	UL94
DTUL at 1,8 MPa	270 °C	ISO 75-1
DTUL at 8,0 MPa	215 °C	ISO 75-1
Conformities	FDA RoHs Class VI	CFR 77.1380 2011/65/EU RoHS USP 35 (88)

Properties	Value	Test standard
Colour	yellow	-
Carrier material	PPS	-
Temperature resistance	300 °C	-
Lightfastness	6	Blue scale

Sophisticated Safety
Solutions for HPLC.

Better **b.safe**



Stand 07/2023

www.bsafe.de

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