

Technisch datablad

Technical Data Sheet

Mechanical values for PVC bulb material, cold-elastic, colourless

Properties of parts in optimum condition	Measurement method	Unit	Value
Density	DIN 53 479	g / ccm	1,15 ±0,02
Hardness according to Shore A +23°C, 3"	DIN 53 505		55
Hardness according to Shore A +23°C, 15"	DIN 53 505		52
Hardness according to Shore D +23°C, 3"	DIN 53 505		-
Hardness according to Shore D +23°C, 15"	DIN 53 505		-
Tensile Strength	DIN 53 455	N / mm ²	6,5
Breaking Tension	DIN 53 455	%	480
Tearing Resistance	ISO 34 Method B		
	Conducted acc. to a	N / mm	18
Cold fracturing temperature		°C	No fracture down to -45°C
Combustion Rate	ISO 3795 (US-MVSS 302)	mm / min	-
Combustion Residue	DIN 53 568	%	-
Jelling Temperature		°C	180 to 220
Raw material basis			
PVC with K-Value 70, Cadmium-free stabilized			

The bulbs displayed in this catalogue are manufactured in soft cadmium free PVC by a production process which guarantees parts which are absolutely free of stresses. Amongst many other advantages they excel by reason of their faultless functioning over a wide temperature zone from -10°C to +40°C. The maximum approved temperatures to which these bulbs may be exposed are between -30°C and +110°C. Where required material with an even greater level of heat or cold stabilisation can be used. Apart from the given standard colours for each type of bulb, the bulbs can be produced in any colour desired, i.e. to match an original colour. Aroma additives are also possible.

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Physiologically unobjectionable soft PVC, in accordance with the present 47th recommendation from the Federal Ministry of Health, can be used for medicinal and pharmaceutical products. The bulbs can be sterilized by boiling or by means of gas or radiation. Steam sterilization has only limited applications. Information on the chemical and mechanical resistance of the PVC material is given in a table at the end of this catalogue.

The bulbs can be produced with other opening sizes than those given as standard, as well as in different weights (with a resulting influence on their self-reinflating properties). Apart from the possibility of producing bulbs with inscriptions, there is also neutral individual packaging available for rectal syringes with pipe, ear syringes, breast relievers and ladies duche sets.

Should the bulbs illustrated here not be suitable for various applications, then other production moulds are available. Patterns or production mould can be manufactured at short notice to models or drawings. These moulds can be made with various surfaces i.e. smooth, matt, sanded or raised, as well as with ribs, rings and inscriptions. Our technological consultation service can advise on matters ranging from the conception to the application of the bulbs.

Chemical resistance of bulb material

Chemical	Concentration	Result
Acetic acid	10%	resistant
dto.	concentrated	not resistant
Aluminium chloride	10%	resistant
dto.	saturated solution	resistant
Alum solution	saturated solution	resistant
Ammonia	10%	resistant
dto.	50%	resistant
Ammonium chloride	20%	resistant
dto.	saturated solution	resistant
Ammonium nitrate	10%	resistant
dto.	saturated solution	resistant
Ammonium sulphate	20%	resistant
dto.	saturated solution	resistant
Benzene		not resistant
Bleaching alkali		resistant
Butyl acetate		resistant

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Chemical	Concentration	Result
Calcium chloride	10%	resistant
dto.	saturated solution	resistant
Caustic soda	10%	resistant
dto.	35%	not resistant
Chromic acid	400 g/l	discolours
Chromic acid / Phosphoric acid	1 : 1	hardens
Chromic acid / Sulphuric acid	1 : 1	discolours
Citric acid	10%	resistant
dto.	saturated solution	resistant
Copper chloride	10%	resistant
dto.	saturated solution	resistant
Copper sulphate	10%	resistant
dto.	saturated solution	resistant
Diesel oil		resistant
Diisobutylketone		not resistant
Dimethylformamide		not resistant
Distilled water		resistant
Fluoric acid	10%	resistant
Formaldehyde	10%	resistant
dto.	35%	resistant
Formic acid	10%	resistant
dto.	85%	not resistant
Glycerine		resistant
Glykol		not resistant
Hydrochloric acid	10%	resistant
dto.	concentrated	discolours
Hydrogen peroxide	30%	resistant
Indicator petrol		resistant
Iron trichloride	10%	resistant
dto.	20%	resistant
dto.	saturated solution	resistant
Lactic acid	10%	resistant
dto.	20%	resistant
dto.	50%	resistant
Machine oil		resistant
Mineral oil		resistant
Nitric acid	10%	resistant
dto.	concentrated	not resistant
Oxalic acid	saturated solution	resistant

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Chemical	Concentration	Result
Perchloroethylene		not resistant
Phosphoric acid	10%	resistant
dto.	85%	resistant
dto.	concentrated	resistant
Potassium bichromate	8%	resistant
Potassium chloride	10%	resistant
dto.	saturated solution	resistant
Potassium hydroxide	10%	resistant
dto.	50%	resistant
Soda solution	10%	resistant
Sodium bicarbonate	saturated solution	resistant
Sodium sulfate	25%	discolours
Sodium sulfide	10%	resistant
Sodium thiosulfate	10%	resistant
Solution of cooking salt	23%	resistant
Spirits		not resistant
Sulphuric acid	10%	resistant
dto.	50%	resistant
dto.	concentrated	limited resistance
Tartaric acid	10%	resistant
dto.	saturated solution	resistant
Trichlorethylene		not resistant
Water		resistant
Xylol		not resistant
Zink chloride	10%	resistant
dto.	50%	resistant

Test duration: 6 weeks

This technical information can and should only be regarded as non-binding advice. We would ask that all particulars relating to work with our products should be related to the local conditions and material used. Depending on the bulb colour slight variations in the results might occur.