Cellular rubber material data sheet
ZK EPDM black

Product description:
A black, closed, fine, soft-elastic cellular rubber. Different levels of hardness give different areas of application and abrasion resistance values.
Many different shapes can be produced from the raw material, e.g. square sections, punched parts, seals, shaped parts.

Technical data:

Cellular rubber quality		**ZK EPDM black**	
Raw material basis		EPDM	
Cell structure		closed cell	
Cell size		≤ 0.5 mm	
Density		130 ± 20 kg/m³	ISO 845
Application temperature		- 40 to + 100 °C, short time to 120 °C	
Linear shrinkage	3 h at 80 °C and 6.3 mm thickness	≤ 5 %	WSK-M2D419-17
Outdoor exposure		Very good weather resistance	ISO 877
Ozone resistance		Resistant to cracking (0)	ISO 1431-1
Corrosion resistance		Level 3 (annealing colours, strong)	VW PV 3976
Compression set	at 23 °C, 50 %	≤ 65 % after 0,5 h, ≤ 25 % after 24 h	ASTM D-1056
	at 40 °C, 50 %	≤ 80 % after 0,5 h, ≤ 50 % after 24 h	
Compression deflection	at 25 % compression	35 ± 15 kPa	ASTM D-1056
	at 50 % compression	120 ± 40 kPa	
Water absorption		≤ 5 %	ASTM D-1056
Tensile strength		≥ 350 kPa	ISO 1798
Elongation at break		≥ 150 %	ISO 1798
Tear resistance		≥ 1.1 kN/m	ISO 34-1
Rebound resilience		50 ± 5 %	ISO 4662
Shore hardness 00		35 ± 6	ISO 868
Electrical conductivity		> 1.2 TΩ	EN 61340
Thermal conductivity		≤ 0.045 W/mK	ISO 8302
Fire behaviour	at 3.0 mm thickness	passed	based on FMVSS 302

Information:
We reserve the right to certain variations in respect of pore size, pore type, colour and plasticity as well as to changes which arise on the basis of new chemical and technical knowledge. All information is based upon tests carried out with considerable care. However, no guarantee can be accepted for agreement with results arising from use since from experience the effect of factors unknown to us which can affect the properties and life-time of the material must be taken into account during different conditions of use.

Storage:
Do not store at high temperatures and/or high atmospheric humidity! Process material immediately since natural shrinkage occurs. Shrinkage is a natural phenomenon of the material and cannot therefore be avoided. We can accept neither claim nor return in cases of shrinkage.

Examples for chemicalresistances:

Medium	Evaluation
Acids and bases in common concentrations water, water steam up to 100 °C sea water potassium and sodium compounds alum aqueous detergent photographic chemicals ammonia cold acetylene alcohols glycerine brake fluids glycol-based anti-freeze carbonic acid ozone silicone oil bleaching powder aqueous	deployable
Chlorine gas ammonia hot conc. hydrochloric acid	limited deployable
Fuels oils greases mineral spirits solvents such as toluene dichloromethane trichloroethylene perchloroethylene (PER) cellulose thinners conc. nitric acid conc. sulfuric acid	not recommended

Attention! Important Note:
Above information are based on best present knowledge of current technology, but do not guarantee faultless processing of our products. The information is based on practical results of our tests, but is not binding and does not constitute warranties of characteristics in terms of Federal Supreme Court jurisdiction. Our information does not constitute a legally binding assurance of certain properties or suitability for a specific purpose. Supplementary information by our specialists are merely recommendations, for which no liability is accepted.
Due to the many possible applications of our products, we recommend subjecting the project to a thorough suitability test on original materials before release for further application.
Since our information is non-binding we do not warranty their correctness. For this reason we accept no liability for possible improper processing based on information submitted by our employees.
This technical data sheet replaces all previous versions and is valid until a new version is issued, or until Dec. 31, 2022. Please request the latest version after Jan. 01, 2023.

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