

Compri-hexflame 45-1000 (HL3) / EN45545-2 und Compri-hexflame 45-7000 (HL2) / EN45545-2

Compact and Sponge Rubber Sealants



Product Information

The Compri-hexflame 45-1000 sealant easily fulfils the requirements of the European standard EN45545 in category HL3 for R22/R23. Compri-hexflame 45-7000 is also subject to the EN45545 standard in category HL2 for R22/R23. The materials are compact rubber (50, 60 and 70° Shore A).

Function / Application Area

Compri-hexflame 45-1000/7000 fulfils high fire protection requirements and was specially developed for the rail vehicle, automotive and electrical industries. The sealant is mainly used for heat and sound insulation, vibration damping, as well as for protection against dust, moisture and draughts.

Mixture: HexFlame 45-1000
**Specification: EN 45545-2, Class R22/R23 HL3, UL 94 V,
 DIN 5510-2, NF F 16-101, ECE-R118, NFPA 130, BS 6853**
Technical Data

Characteristics	Traget Value	Test Result	Method
Elastomer	EPDM	EPDM	DIN ISO 1629
Crosslinking		Sulfur	
Colour	Black	Black	
Density	-	Ca. 1,51 g/cm ³	EN ISO 1183
Hardness	60 +/- 5 SH A	64 SH A	DIN ISO 7619-1
Tensile strength	-	Ca. 5 N/mm ²	DIN 53 504
Elongation at break	-	> 400 %	DIN 53 504
Tear resistance	-	Ca. 5 N/mm	DIN ISO 34-1 A
Compression set			
24 h / 70 °C	-	16 %	ISO 815
24 h / 100 °C	-	38 %	ISO 815
Ozone resistance			
168 h / 40°C / 50 pphm	No cracks	No cracks	DIN ISO 1431-1
Nitrosamine-free	No raw materials are used that form carcinogenic nitrosamines.		
Halogen-free	Halogen-free (< 0,02 %)		
REACH/SVHC conformity	Complies		
EN 455 45 Classification (2016)		R22/R23, HL3	EN 45545-2
Smokeproof / Gasanalysis	Max. 150 (HL3)	57 Ds max	EN ISO 5659-2
Oxygen Index	Min. 32 % (HL3)	36 %	ISO 4589-2
Toxicity	Max. 0,75 CIT NLP (HL3)	0,12	NF X 70-100-1 NF X 70-100-2
DIN 5510 Classification		S4-SR2-ST2	DIN 5510-2
Fire test		S4-SR2-ST2	DIN 548 37
Toxicity (2+6 mm)	< 1 FED tzul = 15 < 1 FED tzul = 30	0,04/0,04 FED tzul = 15 0,08/0,1 FED tzul = 30	DIN EN ISO 5659-2
UL 94 V fire test			
3 und 6,5 mm Thickness	-	V-0	UL 94 V
ECE-R118 sspendix 8			
Vertikal check, 2 mm	< 100 mm/min	0 mm/min	ECE-R118
NF F 16-101 Classification		F1-I2	NF F 16 101
Smokeproof	< 20 (F1) IF	10 IF	NF X 10-702

Characteristics	Target Value	Test Result	Method
Gasanalysis			NF X 70-100
Oxygen Index	> 32 % (I2)	36,1 %	ISO 4589-1/-2
Glow Wire	Min. 850 °C	960 °C	NF EN 60695-2-10/11
NFPA 130 Classification	ASTM C1166, ASTM E662, SMP 800-C		
Flame spread	Max. 4 In/min	1,6 In/min, kein Schmelzen/Tropfen	ASTM C 1166-06
Smoke proof nach 1,5 minutes	Max. 100	40	ASTM E 662-15 Flaming mode
nach 4,0 minutes	Max. 200	64	Flaming mode
Toxicity		Erfüllt	SMP 800-C
British Standard BS 6853 Classification	Table 7 Cat. II		
Oxygen Index (cat. II)	Min. 28 %	37,9 %	ISO 4589-2 10 mm
Smoke proof (cat. II)	Max. 0,061 A ₀ m ² /g	0,033 A ₀ m ² /g	BS 6853 Annex D.8.3:
Toxicity (cat. II)	Max. 3,6 R	0,4 R	BS 6853 Annex B.1
Calorific value	-	22,61 MJ/kg	ISO 5660-1 Cone
Gas transition temperature	-	- 64 °C	BMW GS 97036
Elect. contact resistance	-	1,5E+14 Ohmcm	IEC 60093
Operating temperature range	-	-40 / +100 °C	-
Cold-break temperature	-	-47 °C	ASTM D 2137 A

The results were determined on vulcanised (10 min/180 °C) test panels.

Mixing properties, uncrosslinked	Target Value	Test Results	Method
Mooney Viskosität ML 1+4 100 °C	-	62 MU	ISO 289-1
Mooney Scorch 130 °C			ISO 289-1
Viskosität	-	44 MU	
T5	-	6 min	
Rheologie MDR 2000 0,5° 1,67 Hz 3'180 °C			ISO 6502
ML	-	1,65 dNm	
MH	-	13,5 dNm	
T5	-	0,6 min	
T10	-	0,75 min	
TS2	-	0,9 min	
T90	-	2,20 min	

Mixture: HexFlame 45-7000 Specification: EN 45545, Class R22/R23 HL2**Technical Data**

Characteristics	Target Value	Test Result	Method
Elastomer	EPDM	EPDM	
Crosslinking		Sulfur	
Colour	Black	Black	
Density		Ca. 0,8 g/cm ³	VDA 675 106
Hardness		N.s.	VDA 675 102
Tensile strength		Keine Prüfung	VDA 675 205
Elongation at break		Keine Prüfung	VDA 675 205
Compression set 22 h / 70 °C		Keine Prüfung	VDA 675 217
Ozone resistance		Beständig	VDA 675 311
Nitrosamine-free	No raw materials are used that form carcinogenic nitrosamines.		
Halogen-free	Halogen-free		
Fire test	CREPIM report 1445/05/185 A		EN 455 45
Smoke proof	< 300 Ds max (HL2)	102,35	ISO 5659-2
Oxygen index	> 28 % (HL2)	31,1 %	ISO 4589-2
Gasanalysis	< 0,9 CIT NLP (HL2)	0,54 CIT NLP	NF X 70-100-1/-2 600°C

The results were determined on vulcanised (10 min/180 °C) test panels.

*The tests are accomplished for certain thicknesses, please refer to the corresponding certificate.

This material is available as stripes or rolls.

An adhesive can be applied according to the requirement by the customer.

This information only relates to the rubber foam material and not to the adhesive or the adhesive property.

All mentioned data are guideline values. A commitment cannot be deducted.