


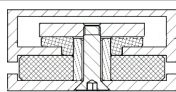



EN45545 Fire Protection Certificates on Angst + Pfister products


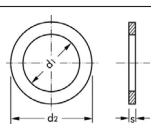


The pan-European mandatory fire protection standard EN45545 unifies the European legal requirements. It provides that all material over 100g of weight needs to be subjected to a fire test. EN45545 replaces all previously valid national regulations from March 2016 onwards.

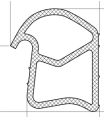
APSOvib® Antivibration Technology

Part type		Material	Hardness ShA +/-5	DIN EN45545
Antivibration elements for bogies (layer springs, primary buffers, round and stop buffers)		NR	50 ShA	R24: HL2
		NR(BR)	70 ShA	R24: HL3
Floor supports		CR	45 ShA	R10: HL2
		CR	49 ShA	R9: HL3, R10: HL3
		CR	70 ShA	R9: HL3, R10: HL3
		EPDM	46 ShA	R10: HL3
Floor supports – Metal Cushion		Metal Cushion		> HL3
Floor supports – PUR – metal		APSOPUR® L55 (12.5 mm)		R10: HL3

APSOseal® Sealing Technology

Part type	Production technology	Material	Type	Hardness ShA +/-5 (Density g/cm³)	DIN EN45545
Molded parts, molded flat gaskets, O-rings		EPDM	Compact	60 ShA	R1: HLR2
		EPDM	Compact	65 ShA	R22: HL2, R23: HL2
		EPDM	Compact	70 ShA	R22: HL3, R23: HL3
		VMQ	Compact	40 ShA	R22: HL3, R23: HL3
		VMQ	Compact	70 ShA	R22: HL2, R23: HL3
		EPDM	Compact	70 ShA	R22: HL3, R23: HL3
Flat gaskets		VMQ	Foam	(0,16 g/cm³)	R22: HL3, R23: HL3
		VMQ	Foam	(0,208 g/cm³)	R22: HL2, R23: HL2
		VMQ	Foam	(0,35 g/cm³)	R22: HL3, R23: HL3
		VMQ	Foam	(0,43 g/cm³)	R22: HL3, R23: HL3
		CR	Foam – closed cells	(0,195 g/cm³)	R24: HL3

APSOseal® Sealing Technology

Part type	Production technology	Material	Type	Hardness ShA +/-5 (Density g/cm ³)	DINEN45545	
Elastomeric profiles		Extrusion	EPDM	Compact	50 ShA	R22: HL2, R23: HL2, R24: HL2
			EPDM	Compact	60 ShA	R22: HL3, R23: HL3, R24: HL3
			EPDM	Compact	65 ShA	R22: HL3, R23: HL3
			EPDM	Compact	70 ShA	R22: HL3, R23: HL3
			EPDM	Compact	75 ShA	R22: HL3, R23: HL3
			EPDM	Compact	77 ShA	R22: HL3, R23: HL3
			EPDM	Foam	(0,8 g/cm ³)	R22: HL2, R23: HL2
			EPDM	Foam – mixed closed and open cells	(0,8 g/cm ³)	R22: HL2, R23: HL2
			VMQ	Compact	40 ShA	R22: HL3, R23: HL3
			VMQ	Compact	50 ShA	R22: HL3, R23: HL3
			VMQ	Compact	60 ShA	R22: HL3, R23: HL3
			VMQ	Compact	70 ShA	R22: HL3, R23: HL3
			VMQ	Foam – closed cells	(0,35 g/cm ³)	R22: HL3, R23: HL3
			VMQ	Foam – closed cells	(0,55 g/cm ³)	R22: HL3, R23: HL3

APSOfluid® Fluid Handling Technology

Part type	Product	Material	DIN EN45545
Industrial hoses	Conveyance hose for water	EPDM	R22: HL3 R23: HL3
	Cable protection hose	EPDM and NBR	R22: HL3 R23: HL3
	Cable protection hose	Silicon	R22: HL3 R23: HL3
	Air brake hose	CR	R22: HL3 R23: HL3
Hydraulic hoses	Hydraulic hose Type 2TE	NBR/EPDM	R22: HL3 R23: HL3
	Hydraulic hose Type 1SC	NBR/EPDM	R22: HL3 R23: HL3
	Hydraulic hose Type 2SC	NBR/EPDM	R22: HL3 R23: HL3
	Hydraulic hose Type 1SN	NBR/EPDM	R22: HL3 R23: HL3
	Hydraulic hose Type 2SN	NBR/EPDM	R22: HL3 R23: HL3
Shrink hoses	Shrink hose	Polyolefin	R22: HL3 R23: HL3
Metal hoses	ASSIWELL® metal hose	Stainless Steel	> HL3

APSOplast® Engineering Plastics Technology

Material	Colour	DIN EN45545
UP-HLM FR Hand layup GRP Laminate		R1, R2, R3: HL2
UP-GRP Pultrusion Profile		R22, R23, R24: HL3
UP-GM 203	Red/White	R1, R2, R3, R6, R22, R23, R24: HL3 R7, R17: HL2
EP-GC 202	Natural (Yellow/Brown)	R1, R2, R3, R11, R12, R22, R23, R24: HL3 R7, R17: HL2
PE-UHMW FR	Black	R7, R22, R23, R24: HL2
PA 66 FR	Black	R24, R26: HL3
PA 6 FR	White/Black/Coloured	R22, R23, R24, R25, R26: HL3
PA 6 FR Extrusion Profile	Coloured	R22, R23, R24, R26: HL3
PC FR	Transparent	R1: HL1, R3: HL2 R4, R22, R23, R24: HL3
Shrink Hose Polyolefin	Black	R22:HL3 R23:HL3

In addition to this range of products we can supply you with special and/or customized products upon request at any time: consult us!

"The information and data provided in these pages are intended only as a general summary and as a guideline on the matters of interest. These information and data are not intended to be comprehensive and they do not represent guaranteed properties. The user is responsible to decide the suitability of Angst+Pfister's products for each application."

Contact

Angst + Pfister AG
ch@angst-pfister.com
www.angst-pfister.com