Semi-rigid elastomeric foam (SERIEF)

Kaiflex R-FORCE Technical Data

Patent pending

Material		Semi-rigid elastomeric foam (SERIEF)	Test acc. to ASTM D 1056/ASTM D 6576
Characteristics		High load-bearing durable foam, semi-rigid, still bendable and not brittle	
Application		Temperature and/or noise shielding	
Cell structure		Closed, very fine cell	
Colour		Black	
Upper temperature limit		+85 °C	
Lower temperature limit		–50 °C (–200 °C)	See remark (1)
Compressive strength		>50 kPa (25 %)	Test acc. to EN 826/ASTM C 165
Tensile strength		>3 MPa	Test acc. to DIN 53 504/ISO 37/ASTM D 412
Elongation at break		>80 %	Test acc. to DIN 53 504/ISO 37/ASTM D 412
Thermal conductivity	at –30 °C at 0 °C at +10 °C at +40 °C at +60 °C	≤0,036 W/(m·K) ≤0,039 W/(m·K) ≤0,040 W/(m·K) ≤0,043 W/(m·K) ≤0,045 W/(m·K)	Test acc. to DIN EN ISO 8497/ASTM C 177
Water vapour permeability	Moisture resistance factor μ	≥5.000	Test acc. to DIN EN 12086
Water absorption		<3 %	Test acc. to ISO 26/ASTM D 570
Fire classification	Euroclass ◊ Self-extinguishing	E B_L-s1, d0 * Yes (E)	Test acc. to DIN EN 13501-1 Test acc. to ISO 11925-1
Practical fire behaviour		Flame retardant, self-extinguishing, does not melt or drip	
Other attributes	pH-Value	7 (neutral)	
Thermal expansion coefficient	Cryogenic temperature +22 °C to –196 °C	3,94 x $10^{-6}K^{-1}$	Test acc. to EN 13471
Acoustic Properties	Sound reduction L_{In} Sound absorption level α_w	>12 dB (A) >0,20 (H)	Test acc. to EN 14388 Test acc. to ISO 354/ISO 11654
Resistance to	Mould growth Chemicals	Very good Very good/good (oil, petrol, water, low concentrated acids)	In acc. with VDI 6022 In acc. with DIN EN ISO 2812-1
Environmental aspects		ODP Zero GWP Zero	
Health aspects		Dust & fibre free Heavy metal (e.g. cadmium, lead) and formaldehyde free	
Storage		Store in a dry room at a typical relative humidity (between 50 % and 70 %) and room temperature (between 0 °C and +35 °C)	
Outdoor applications		Needs protection against UV-radiation	See remark (2)
Glueing		With Kaiflex adhesive 415plus, Kaiflex adhesive 494 HHF (hexan and halogen free)	

Remark (1) For temperatures below –50 °C please contact our Technical Support Team for advice.

Remark (2) To protect against UV-induced deterioration Kaiflex should be either painted using Kaifinish paint or covered with a suitable UV resistant cladding system within 3 days of being installed outdoors (e.g. Kaiflex Protect R elastomeric cladding, Kaiflex INCERAM fire protection cladding).

* With Kaiflex INCERAM-Cladding.

◊ The Euroclass rating applies to metalic or solid mineral substrates.