



FLEXCOMP[®]

HIGH-PERFORMANCE SILICONE ELASTOMERS FOR RAILWAY APPLICATIONS.

- ▶ Safely applicable
- ▶ Highly flexible
- ▶ Flame resistant
- ▶ Certified

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RELIABLE – SAFE – LONG-LASTING: FLEXCOMP® SILICONES.

Silicones of the Series FLEXCOMP® RB are compounds with extraordinary properties, which predestine them especially for applications in the railway sector.

FLEXCOMP® Silicones are

- ▶ Permanently elastic, no melting or creeping
- ▶ Resistant to ozone, UV radiation, salt water, industrial climate and weathering; repels water and dirt
- ▶ Resistant to cold (down to -110°C) and heat (up to 300°C).

SPECIAL BENEFITS THAT FLEXCOMP® OFFERS THE RAILWAY INDUSTRY.

FLEXCOMP® Silicones from M+S Silicon are ground-breaking developments of a market leader of silicones in railway applications:

- ▶ Low flammability
- ▶ Extremely low smoke density when burning
- ▶ No toxic fumes
- ▶ Free of brominated flame retardants
- ▶ Broad portfolio
- ▶ Certifications of all relevant norms available (see table).

RANGE OF APPLICATION OF FLEXCOMP® IN THE RAILWAY SECTOR.

FLEXCOMP® ist being processed into extrudates, calendered sheets and moulded parts, and also finished parts:

- ▶ Edge and finger protection profiles, e.g. for doors
- ▶ Sealing profiles, frames, or rings, e.g. for windows, rooflights
- ▶ Sealings for equipment, machines, motors, ...
- ▶ Sheetings / laminates, e.g. for bellows and flooring.



FLAME-RESISTANT SILICONES FOR THE RAILWAY INDUSTRY – CERTIFIED CLASSIFICATIONS.

	EN 45545-2:2013+A1:2015	others	shore hardness	colour
FLEXCOMP® Series RB-R: flame resistant, universally applicable				
RB-R 50010	R22/R23: HL3		50°	blueblack
RB-R 50010-09	R22/R23: HL3		50°	black
RB-R 60010-03	R22/R23: HL3	BS 6853:1999	60°	black
RB-A-U 60010-03	R22/R23: HL3		60° (untempered)	blueblack
RB-R 70010-06	R22/R23: HL3		70°	black
RB-R 70010-12	R22/R23: HL3		70°	blueblack
RB-R 70020	R22/R23: HL3	NFPA 130:2017	70°	blueblack
RB-R 75020	R22/R23: HL3		75°	white
FLEXCOMP® Specialities: a selection				
STRB 25130-02 high tear strength with flame retardants	R22/23:HL3		25°	blueblack
STRB 60130-01 high tear strength with flame retardants	R22/23:HL3	NFPA 130:2014	60°	black
ME-A 65116 antistatic	R22/23:HL3		65°	black
X-RB-R 50010 flame resistant silicone foam, density 0,4 g/cm ³	R22/23:HL3	NFPA 130:2017	-	blueblack
X-RB-R 03510-01 flame resistant silicone foam, density 0,35 g/cm ³	R22/23:HL2		-	blueblack

Conformities, e.g. according to UL 94, and other details will be answered by our customer service.



FLEXCOMP® THE COORDINATES.

FLEXCOMP® compounds offer an extremely broad range of properties. A selection:

Hardness	10-95 Shore®A
Temperature Range	-110°C bis +300°C (-166°F bis +572°F)
Density	0.95 – 2.30 g/cm ³ (foamed 0.23 - 1.10 g/cm ³)
Tensile Strength (breakpoint)	3 – 13 N/mm ² (MPa)
Tear Strength (Notch Resistance)	10 – 63 N/mm (ASTM D 624 B) 3 – 25 N/mm (DIN 53507)
Elongation at Break	100 – 1500 %
Rebound Resilience (Elasticity)	25 – 75 %
Compression Set (Permanent Deformation)	50 – 0 % (175°C, 22h) 20 – 3 % (125°C, 22h) 10 – 0 % (100°C, 22h)
Flammability Classification	EN 45545-2, BS 6853, NFPA 130, UL94

FLEXCOMP® TYPE SERIES WITH ESPECIALLY INTERESTING PROPERTIES:

FLEXCOMP® STR

- ▶ World record holder in tensile strength for silicones, basis for our new developments FLEXCOMP® STRB

FLEXCOMP® RH

- ▶ Outstandingly high heat resistance, for applications close to motors etc.

FLEXCOMP® RC

- ▶ Extremely resistant to cold, for applications in cooling

FLEXCOMP® F

- ▶ Fluoro silicones with exceedingly increased chemical resistance

FLEXCOMP® X und FX

- ▶ Foamed silicones and fluoro silicones for reduced weight and highly compressible items

Disclaimer: The mentioned figures are intended as a guide and should not be used in preparing specifications. They have been taken from pressed plates and represent our current status of knowledge. They do not liberate the customer from careful end-use application tests, neither from the duty to check on violations of proprietary rights. We reserve the rights for alterations at any point.