

ARMAFLEX RAIL SD

Description: A highly flexible, closed cell insulation foam with improved retardant properties, low smoke generation and built-in Microban® antimicrobial protection for railway vehicles.

Material Type: Elastomeric foam based rubber; manufactured with Armaprene® patented technology; US patent no. 8 163 811, EU patent no. 2 261 305.

Colour: Blue

Material Special Information: The pressure sensitive adhesive coating is based on modified acrylate basis with mesh structure and covered with polyethylene foil. Traces of silicone can be found on protection paper/foil used to protect self-adhesive closures.

Applications: Insulation / protection for air ducts and pipes (inc elbows, fittings, flanges etc) of air-conditioning / refrigeration systems to prevent condensation.

Remarks: Armaflex Rail SD is not designed for outdoor applications exposed to sunlight / not UV stable.

PROPERTY	SPECIFICATION LIMITS	TEST	REMARKS
Temperature Range			
Max service temperature	+110°C (+85°C if sheet or tape is glued to the object with its whole surface)	EU5654	Tested acc. to EN14706 EN14707 and EN14304
Min service temperature	-50°C		
Thermal Conductivity			
	$\lambda \text{ } 0^{\circ}\text{C} \leq 0.040 \text{ W}/(\text{m}\cdot\text{K}) \quad [40+0.1 \cdot \vartheta_m + 0.0009 \cdot \vartheta_m^2]/1000$	EU5654	Declared acc. to EN ISO 13787 Tested acc. to EN 12667 & EN ISO 8497
Water Vapour Diffusion Resistance			
	$\mu \geq 5'000$	EU5654	Tested acc. to EN 12086 & EN 13469
Fire Performance			
Hazard Levels	HL2, R1 (3mm sheets & tape; HL3, R1)	EU5838 EU5786 EU6268 EU6422	Declared acc. to EN45545-2
Fire behaviour & fire side effects	S4, ST2, SR2, FED < 1	D5882	Classified acc. to DIN 5510-2 Tested acc. to DIN 54837
Russian Federation Certificate of Conformity	G1, B2, D2, T2	RUS 6866	Declared acc. to GOST 12.1.044-89
Burning behaviour for use in motor vehicles (ECE Regulations)	Passed Annex 9, Passed Annex 6, 7, 8	D5842 D5612 D5578	ECE R-118 p. 6-8, ECE -R18 annex.9
NFPA 130 American fire test to railway components	$I_s \leq D_s \text{ (4.0)} \leq 100$	D6905 D6906 D6907 D6908	Classified acc. to NFPA 130:2014 Tested acc. to ASTM E162 & ASTM E662
Practical fire behaviour	Self-extinguishing, does not drip, does not spread flames		
Other technical features			
Dimensions and tolerances	In accordance with EN 14304, table 1	EU5654	Tested acc. to EN 822, EN 823, EN 13467
Fulfils hygiene requirements of Russian Rail Industry		RUS 6567	
Storage & Shelf Life	Self-adhesive tapes, self-adhesive sheets: 1 year	Stored in dry clean rooms at normal relative humidity (50% to 70%) and ambient temperature (0°C - 35°C)	

Convertors and suppliers of die cut gaskets, tape, sheeting, fabrications, machined plastic components, rubber mouldings, extrusions and adhesives.



ARMAFLEX RAIL SD-C

Description: A highly flexible, closed cell insulation foam with improved retardant properties, low smoke generation and built-in Microban® antimicrobial protection for railway vehicles.

Material Type: Elastomeric foam based rubber; manufactured with Armaprene® patented technology; US patent no. 8 163 811, EU patent no. 2 261 305.

Colour: Blue with silver metallic look coating

Material Special Information: The pressure sensitive adhesive coating is based on modified acrylate basis with mesh structure and covered with polyethylene foil. Traces of silicone can be found on protection paper/foil used to protect self-adhesive closures.

Applications: Insulation / protection for air ducts and pipes (inc elbows, fittings, flanges etc) of air-conditioning / refrigeration equipment to prevent condensation.

Special Features: The covering offers an excellent durability, even under UV exposure when used for outdoor applications and is easy to clean.

Remarks: When dimensioning the insulation thickness, please calculate with an external surface coefficient of 8 W/(m-K)

PROPERTY	SPECIFICATION LIMITS	TEST	REMARKS
Temperature Range			
Max service temperature	+110°C (+85°C when sheet or tape is glued to a flat object)		Tested acc. to EN14706 EN14707 and EN14304
Min service temperature	-50°C		
Thermal Conductivity			
	$\lambda \text{ } 0^{\circ}\text{C} \leq 0.040 \text{ W}/(\text{m}\cdot\text{K}) \quad [40+0.1 \cdot \vartheta_m + 0.0009 \cdot \vartheta_m^2]/1000$		Declared acc. to EN ISO 13787 Tested acc. to EN 12667 & EN ISO 8497
Water Vapour Diffusion Resistance			
	$\mu \geq 10000$		Tested acc. to EN 12086 & EN 13469
Fire Performance			
Hazard Levels	HL3, R1	EU6362 EU6253	Declared acc. to EN45545-2
Practical fire behaviour	Self-extinguishing, does not drip, does not spread flames		
Other technical features			
Dimensions and tolerances	In accordance with EN 14304, table 1		
Storage & Shelf Life	Self-adhesive tapes, self-adhesive sheets: 1 year	Stored in dry clean rooms at normal relative humidity (50% to 70%) and ambient temperature (0°C - 35°C)	

Convertors and suppliers of die cut gaskets, tape, sheeting, fabrications, machined plastic components, rubber mouldings, extrusions and adhesives.

