MF 749 E CR Extrusion grade combustion resistant Silicone Rubber

Master-batch mf 749 e cr is a non-catalysed silicone elastomer intended for extrusion and cable insulation where high resistance to flame is required and for sensitive area's, limited emission of fumes (to be of low toxicity and low opacification).

Special properties include: high grade of fire resistance, excellent dielectric properties, physical and electrical properties maintained over a wide temperature range (-70°C to +250°C).

Characteristics
Natural colour:creamy white.

General Electrical Specifications To BS2848.

Typical Physical Properties and Values		
Hardness, Shore ±5	260°C	60
Specific Gravity		1.14
Tensile Strength, Mpa		7.8
Elongation at Break, %		165
Brittle Temperature °C		-78
Max Operating Temperature, °C (Temperature range can be extended for short duration)		-70°/+250°C
Compression Set (22 Hours At 177°C)		35%

Electrical (Cured samples)	
Transversal resistivity, ohm.Cm	$2X10+_{15}$
Dielectric Strength, KV/mm (2mm Thick Sample)	22
Dielectric Constant (1 MHz)	3.2

Thermal	
Thermal Conductivity, Watts/Km 0°-90°C (Kelvin/M)	0.15
90°-260°C	Max 0.17
Properties After Thermal Aging:	7 Days @ 250°C
Shore 'A' Hardness	67
Tensile Strength Mpa	6
Elongation %	110

Fire Resistance
After catalysis and vulcanisation MASTER-BATCH MF 749 E CR was submitted to various tests complying with the legislation currently in force:

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Flame Resistance
Vertical combustion, classification UL 94 VO, 2mm.

London Underground Test
BS6853 (Rolling Stock) Cat.1.

Opacity And Toxicity Of Fumes
The FO class can be obtained from the results of these two test's.

British Rail:
This material also meets the requirements of BS 6853 cat.1 (rolling stock).

Unless Otherwise Agreed Extrusion Tolerances To BS3734 Class E1		
Nominal Above	Dimension Up To	(Values In mm) +/-
0.0	2.5	0.20
25	4.0	0.25
4.0	6.3	0.35
6.3	10.0	0.40
10.0	16.0	0.50
16.0	25.0	0.70
25.0	40.0	0.80

Specific Design Tolerances
Achievable to +/- 0.1mm when required.

COLOURING
Variations in colour to RAL or BS colour charts.