



PLEXLENE HALOGEN FREE FLAME RETARDANT POLYOLEFIN COMPOUND

Grade	Plexlene 2035 O (oil resistant grade)			
Description	Thermoplastic, halogen free, low smoke flame retardant.			
Application	Sheathing compound for cables.			
Characteristics	Meet international specifications for halogen free flame retardant cables. Excellent processing characteristics, good mechanical properties in combination with good flame retardant performance.			
Material Designation	IEC 60092-359 / BS 7655:6-1			
Material Classification	SHF-1 / LTS-1 & LTS-4			
Properties	Test Method	Unit	Specification	Typical Value
Volume Resistivity at 20°C	IEC 540	Ω.m	> 5.0 x 10 ¹²	5.02 x 10 ¹⁴
Volume Resistivity at 70°C	IEC 540	Ω.m	> 1.0 x 10 ⁹	3.50 x 10 ¹³
Volume Resistivity at 90°C	IEC 540	Ω.m	> 7.0 x 10 ⁸	7.97 x 10 ¹²
Tensile Strength (50 mm/min)	IEC 811-1-1	MPa	> 10.5	11.0
Elongation at Break (50 mm/min)	IEC 811-1-1	%	> 150	200
After Ageing at 110°C, 168 hrs				
Tensile Strength (50 mm/min)	IEC 811-1-2	MPa	> 10.0	11.25
Max. Variation		%	+/- 30	+ 2.3
Elongation at Break (50 mm/min)	IEC 811-1-2	%	> 125	176
Max. variation		%	+/- 30	-12.0
Water Immersion Test, after 70°C, 168 hrs	BS 6469-99.1			
Max. variation of Tensile strength		%	+/- 30	-12.3
Max. variation of Elongation		%	+/- 30	-20.0
Durometer Hardness	ASTM D2240	Shore D	52 +/- 4	53
Density	ASTM D 792	g/cm	1.43 +/- 0.05	1.44
Pressure test at high temperature (90°C , 4 h)	IEC 811-3-1	%	< 50	18
Flame Retardant (Vertical Burning)	Test IEC 332-1			
Distance between:				
- Lower edge of top clamp & onset of charred portion		mm	> 50	335
- Lower edge of top clamp & downwards charred portion		mm	≤ 540	470
Oxygen Index	ASTM D 2863	%	-	34
Smoke Density	ASTM D2843	Dm	< 40	20.5
Halogen Content	IEC 60754-1	%	< 0.5	0.19
Acid Gas Emission	IEC 60754-2			
- pH		---	> 5	5.3
- conductivity		μS/mm	< 10	0.78

PLEXCHEM TECHNOLOGIES



Fluid Resistance Properties

Medium	Temperature °C	Duration (hours)	Tensile Strength (N/mm ²)	Variation (%)	Elongation at Break. (%)	Variation (%)
IRM902	70	4	13.7	-6.2	235	+6.8
IRM903	70	4	12.8	-12.3	258	+ 17.3
Diesel	49	24	11.6	-20.5	263	+ 19.5
Gasoline	28	24	10.7	-26.7	247	+12.3

DELIVERY

Form : Granules
Package : 25 kg bags

PROCESSING

Please refer to the processing guide

MATERIALS HANDLING

A clean, cool and dry storage area is recommended

SAFETY

Above mentioned compounds are not classified as a dangerous compound.

The product is supplied in form of free-flowing granules of about 3 - 4 mm in size and can be readily handled with commercially available equipment. All handling and transport of the product may generate some dust and fines that constitute a potential risk for dust explosion.

Inhalation of any type of dust may irritate the air passage and should be avoided.

NOTICE: The information and data contained herein serves only as a guide. No liability, warranty or guarantee of the product is created by this document. It is the user's responsibility to ascertain the appropriate operation conditions based on the user's own equipment and experiences.

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Do you have the safety data sheet for this product? Please contact your service representative for one or E-mail us at: plexchem@plexchem.com.sg

