



Polyethylene FR4832

Chemically Crosslinkable Polyethylene Compound for Primary Automotive Wires

Description

FR4832 is a Chemically Crosslinkable Polyethylene Compound for Primary Automotive Wires.

Applications

FR4832 is intended for use as a 125° C rated primary insulation for crosslinked automotive wire.

Specifications

FR4832 in combination meets the applicable requirements as below when processed using sound extrusion and testing procedure:

SAE J1128/J1127

Physical Properties

Property	Typical Value	Test Method
Data should not be used for specification work		
Density (Compound) (23 °C)	1400 kg/m3	ASTM D 792
Tensile Strain at Break	200 %	ASTM D 412
Tensile Strength	17,25 MPa	ASTM D 412
Retention of Tensile Properties After Ageing (168 h, 165 °C)	>= 80 %	
Brittleness temperature	<= -50 °C	ASTM D 2863
Hardness, Shore D	50	ASTM D 2240

Electrical Properties

Property	Typical Value	Test Method
Data should not be used for specification work		
Dielectric constant (60 Hz) ¹	3,7	ASTM D 150
DC Volume Resistivity	10 POhm.cm	ASTM D 257
Dielectric Strength	> 550 V/mil	ASTM D 149
Dissipation Factor (60 Hz) ¹	0,01	ASTM D 150

¹ 23 °C

Combustion Properties

Property	Typical Value	Test Method
Data should not be used for specification work		
Limited Oxygen Index	25 %	ASTM D 2863
Flame Test (20 AWG - 16 mil cable)	Pass	ISO 6722/SAE J1128

Borealis AG | Wagramerstrasse 17-19 | 1220 Vienna | Austria
Telephone +43 1 224 00 0 | Fax +43 1 22 400 333
FN 269858a | CCC Commercial Court of Vienna | Website www.borealisgroup.com

 Polyethylene
FR4832**Processing Techniques**

Following parameters should be used as guidelines:

Typically the following process conditions are used:

Drying in dehumidified air (2 - 8 h)	55 °C
Barrel 1	96 °C
Barrel 6	110 °C
Max allowed Melt temperature	-120 - 125 °C

Packaging

Package: Smallbins

Package: Bulk

Storage

FR4832 has a shelf life of 12 months from production date if stored in unopened original packages, under dry and clean conditions at temperatures between 10 - 30 °C (50 - 85 °F).

Disclaimer

The product(s) mentioned herein are not intended to be used for medical, pharmaceutical or healthcare applications and we do not support their use for such applications.

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