

DYM-517

Wire & Cable Compound

Semiconductive bonded conductor and insulation shielding compound for MV power cables

Description

DYM-517 is a crosslinkable black polyethylene compound, specially designed for semiconductive conductor shield and bonded insulation shield for power cables. This product has very good electrical conductivity properties, provides good surface smoothness, good fluidity and high resistance to scorch.

Applications

DYM-517 is intended for semiconductive shield of XLPE medium voltage (MV) AC cables with rated voltages up to 66 kV. It can be used as conductor and insulation shield for bonded cable constructions and as conductor screen for strippable cable constructions.

Specifications

DYM-517 is expected to meet the applicable requirements included in below mentioned standards provided it is processed using sound material handling, extrusion and crosslinking practices as well as appropriate testing procedures. This applies to the maximum recommended voltage level indicated in the "Applications" section above since some standards cover wider voltage ranges.

ICEA S-94-649
AEIC CS8
IEC 60502-2

Typical Physical and Electrical Properties

Test Items	Test Method	Unit	Value
Density at 23°C	ASTM D 1505	g/cm ³	1.15
Tensile Strength(200 mm/min)	ASTM D 638	N/mm ²	19
Elongation at Break before ageing		%	210
Tensile Strength after 168hrs at 135°C	ASTM D 638	%	>90
Retention		%	>90
Elongation at break after 168hrs at 135°C			>85
Retention			>85
E.S.C.R 100% "IGEPAL"F20	ASTM D 1693	hrs	>200
Moisture Content	Karl Fischer	PPm	<500
Volume Resistivity			
23 °C	ASTM D 991	Ω·cm	<50
90 °C	ASTM D 991	Ω·cm	<500

* E.S.C.R : Environmental stress cracking resistance

* Data should not be used for specification work.

Processing Techniques

Recommending standard extrusion temperature profiles of **DYM-517** are as follows;

Unit: °C

Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Adapter	Head	Die
90±5	95±5	97±5	100±5	105±5	110±5	110±5	110±5

It is recommended that this product be used in a conventional PE/PVC extruder. (L/D is 20/1 and C/R is 1.8~2.5:1) Specific recommendations for processing conditions can be determined only when the application and type of equipment are known. We recommend hopper drying at 40~60°C for 4 hours with dehumidified air to remove moisture before extrusion.

Packing

600kg Cardboard Box

Storage

Should be stored at room temperatures between 10~50°C. Recommended maximum storage period in dry and clean place is 12 months unopened and in original packaging after the manufacture.



A member of the
Borealis Group

DYM SOLUTION CO., LTD.

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Sensitivity: External

Handling

To ensure health and safety, Material Safety Data Sheets(MSDS) is available on request.

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. To the best of our knowledge, the information contained herein is accurate and reliable as of the date of publication; however we do not assume any liability whatsoever for the accuracy and completeness of such information.

The product can be used only for the application as specified here above. Nothing herein shall constitute any warranty of merchantability or fitness for a particular purpose. It is the customer responsibility to inspect and test our products to satisfy the suitability of this product to customer's particular purpose. No liability can be accepted regarding the use of our products in conjunction with other semiconductive shields materials. DYM makes no warranties which extend beyond the description contained herein. The above-mentioned information relates exclusively to our products when not used in conjunction with any third party materials. The customer is responsible for the appropriate, safe and legal use, processing and handling of our products.



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