

## Super-smooth Semi-conductive Compound for HVDC Power Cable

### Description

DYM-560HVDC is a cross-linkable super-smooth semi-conductive conductor and insulation shielding compound for HVDC power cables. This product provides excellent surface smoothness and electrical conductivity properties than standard semi-conductive shielding compounds. And It is specially designed to provide low space charge accumulation when used in HVDC cable constructions using the HVDC XLPE.

### Typical Physical - Electrical Properties

Test Items	Test Method	Unit	Value
Density at 23°C	ASTM D 1505	g/cm <sup>3</sup>	1.106
Tensile Strength(200 mm/min)	ASTM D 638	MPa	20
Elongation at Break before ageing		%	400
Tensile Strength after 168hrs at 135°C	ASTM D 638	%	>90
Retention		%	>90
Elongation at break after 168hrs at 135°C			>90
Retention			>90
E.S.C.R 100% "IGEPAL"F20	ASTM D 1693	hrs	>200
Moisture Content	Karl Fischer	PPm	<400
Volume Resistivity			
23 °C	ASTM D 991	Ω·cm	<100
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-560HVDC are as followings ; Unit: °C

Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Adapter	Head	Die
95±5	100±5	103±5	105±5	110±5	115±5	115±5	115±5

It is recommended that this product can be used conventional PE/PVC extruder. (L/D is 25~22/1 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 50~65°C for 4 hours to remove moisture before extrusion.

### Packing

Form : 600kg Cardboard Box(Inner Al bag packing)

### Handling

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

### Storage

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

### Disclaimer

The product can be used only for the application as specified here above. 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 materials. No warranties shall be offered which extend beyond the description contained here above. The above-mentioned information relates exclusively to our products when not used in conjunction with any third party materials.



**DYM SOLUTION CO., LTD.**

Head Office : 50, 2gongdan 8-gil, Seobuk-gu, Cheonan-si, Chungcheongnam-do, Korea, <http://www.dymcom.co.kr>  
Tel : +82(0)41 621 6250, 621 8421 Fax : +82(0)41 621 8420