

### LSHF Sheathing and Insulation Compound for Wire & Cables

#### Description

**DYM-8861NFR** is a thermoplastic, non-halogen, low smoke and flame retardant sheathing and Insulation compound for wire and cables. This compound provides good processing, mechanical properties and long term reliability.

#### Specification

IEC 60502 ST7, ST8

BS 7655 ST1~ST4

VDE 0207 Teil 24 (HM2, HM4 & HM5)

UNE 211620-5E DMZ2

#### Typical Physical-Electrical Properties

Test items	Test method	Unit	Value
Specific gravity at 23°C	ASTM D 792	-	1.32
Melt Index(190°C, 2.16kg)	ASTM D 1238	-	0.1
Tensile strength at break	IEC 60811-501	MPa	15
Elongation at break		%	650
Tensile strength after 7days at 110°C	IEC 60811-401	MPa	14
Retention		%	93
Elongation at break after 7days at 110°C		%	600
Retention		%	92
Oil resistance (IRM 902, 70°C, 4 hrs)	IEC 60811-404		
Tensile Strength (Retention)		%	92
Elongation at break (Retention)		%	99
Pressure test at high temp. (110°C, 6hrs)	IEC 60811-508	%	10
Heat shock test (150°C,1hr)	IEC 60811-509	-	Pass
Cold impact test (-15°C)	IEC 60811-506	-	Pass
Oxygen index	ASTM D 2863	%	33
Smoke density (Flaming mode)	ASTM E 662	Ds max	80
Halogen acid gas evolution	IEC 60754-1	%	0
Corrosivity of gases	IEC 60754-2		
pH		-	4.8
Conductivity		µs/mm	2.2
Volume resistivity	ASTM D 257	Ω·cm	5×10 <sup>13</sup>
Water absorption(85°C, 14days)	IEC 60811-402	mg/cm <sup>2</sup>	2.2

\* Data should not be used for specification work.

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#### **Processing Techniques**

Recommending standard extrusion temperature profiles of **DYM-8861NFR** are as follows ;

							Unit: °C
Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Adapter	Head	Die
160±5	165±5	168±5	170±5	175±5	175±5	175±5	180±5

It is recommended that this product can be used conventional PE/PVC extruder. (L/D is 30~20:1 and C/R is 2.5~3.5:1) Specific recommendation 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 to remove moisture before extrusion.

#### **Color & Appearance**

This compound is a basic black color, but colorable, and is supplied in pellet form.

#### **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 6months 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.



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