

# DYM-8658NFR

## Wire & Cable Compound

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

#### Description

**DYM-8658NFR** is a thermoplastic, non-halogen, low smoke and flame retardant Insulation and Sheathing compound for Shipboard, Telecom and Power Cables. This compound provides good processing and outstanding flame retardant properties.

#### Specification

IEC 60092-359 type SHF1

IEC 60502-1 ST8

IEC 60332-3 Category A

BS 7655 : 6.1 types LTS1 & LTS3

UL 444(UTP-C6-LSZH)

#### Typical Physical Electrical Properties

Test items	Test method	Units	Typical Value
Specific gravity at 23°C	ASTM D 792	-	1.48
Melt Index(150°C, 21.6kg)	ASTM D 1238	-	3.8
Tensile strength at break	IEC 60811-501	MPa	13.5
Elongation at break		%	180
Tear resistance	BS 6469:99.1	kg/mm	1.46
Tensile strength after 7days at 100°C	IEC 60811-401	MPa	12.6
Retention		%	> 90
Elongation at break after 7days at 100°C		%	150
Retention		%	> 80
Pressure test at high temp. (90°C, 6hrs)	IEC 60811-508	%	15
Heat shock test (150°C,1hr)	IEC 60811-509	-	Pass
Cold impact test (-30°C)	IEC 60811-506	-	Pass
Water absorption	IEC 60811-402	max10mg/cm <sup>2</sup>	0.001
Oxygen index	ASTM D 2863	%	35
Flame Retardant(UTP-LSZH, AWG24x4pr)	IEC 60332-1-2	50 mm↑/540 mm	Pass
Smoke density (Flaming mode)	ASTM E 662	Ds max	80
Halogen acid gas evolution	IEC 60754-1	%	0.1
Corrosivity of gases	IEC 60754-2		
pH			4.5
Conductivity			50
Fluorine content	IEC 60684-2	max 0.1%	0
Volume resistivity	ASTM D 257	Ω·cm	1×10 <sup>14</sup>
Hardness	ASTM D 2240	Shore D	58

\* Data should not be used for specification work.

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#### Processing Techniques

Recommending standard extrusion temperature profiles of **DYM-8658NFR** are as follows ;

Unit: °C

Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Adapter	Head	Die
140±5	143±5	145±5	145±5	147±5	150±5	150±5	155±5

It is recommended that this product can be used conventional PE/PVC extruder. (**Low Compression Screw L/D is 24:1 and C/R is 1.3~1.5:1**)

Specific recommendation for processing conditions can be determined only when the application and type of equipment are known. We recommend hopper drying at 60°C for 4 hours to remove moisture before extrusion.

#### Color & Appearance

This compound is a basic **Black color** or **Natural color**, and is supplied in pellet form.

#### Packaging

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 12 months 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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