



# DGDN-3364

## High Density Insulation for Telecommunication Cable

### DESCRIPTION

DGDN-3364 is a high density polyethylene designed for high speed extrusion covering on fine wire for telecommunication cable ranging for wide temperature.

It has the following important advantages:

- Excellent thermal stability, toughness and abrasion resistance
- Suitable for insulation for high frequency wave and of small dielectric loss
- Excellent electrical properties over wide ranges of frequency and temperature

#### 1. Basic Properties

Property	Test Method	Unit	Typical Value
Density	JIS K7112	g/cm <sup>3</sup>	0.945
Melt Mass Flow Rate	JIS K7210	g/10min	0.75

#### 2. Physical Properties

Property	Test Method	Unit	Typical Value
Tensile Strength	JIS K6251	MPa	30
Ultimate Elongation	JIS K6251	%	900
Heat Aging Retention*			
Tensile Strength	JIS K6257	%	>90
Elongation	JIS K6257	%	>90
Environmental Stress Cracking Resistance	JIS K6922-2	hors	>500
Brittleness Temperature	JIS K7216	degree C	<-76

\*100deg.C, 48hrs.

#### 3. Electrical Properties

Property	Test Method	Unit	Typical Value
Dielectric Const,1MHz	ASTM D 1531	—	2.32
Dissipation Factor,1MHz	ASTM D 1531	—	0.0001
Volume Resistivity	JIS C6922-2	ohm-cm	>10 <sup>17</sup>
Dielectric Strength **	JIS C2110	kV/mm	26

\*\* 1mm Sheet, Short Time.

#### 4. Processing Techniques

For optimum results, use melt extrusion temperatures in the suggested range of 250 to 280 deg. C. Exact extrusion conditions depend upon extruder size, trough position, and conductor preheat, line speed and cable design. Specific recommendations for processing conditions, however, can be determined only when the application and type of processing equipment are known. Please contact your NUC Sales representative for such particulars.



**LIABILITY**

Neither NUC Corporation nor any of its related companies accept any liability whatsoever arising out of the use of the information or the use, application, adaptation or processing of the products described herein.

Additional Information

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