Technical Data Sheet

Petrothene NA951080

W&C Polyolefin Compound

Product Description

Petrothene NA951080 is a natural, low density, medium molecular weight polyethylene resin containing no additives. NA951080 is selected by customers for use as a base resin for direct peroxide injection (DPI) medium voltage insulation and for use as a compounding material including gas-injected or chemically expanded insulation.

Petrothene NA951080 meets the requirements of the following: ASTM D 1248, Type I, Class A, Category 3, Grade E3; Federal LP390C, Type II, Class L, Category 3, Grade 1.

Regulatory Status

For regulatory compliance information, see *Petrothene* NA951080 Product Stewardship Bulletin (PSB) and Safety Data Sheet (SDS).

Status	Commercial: Active
Availability	North America
Application	Wire & Cable
Market	Wire & Cable
Processing Method	Wire & Cable

Typical Properties	Nominal Value	English Units	Nominal Value	SI Units	Test Method
Physical					
Melt Flow Rate, (190 °C/2.16 kg)	2.20	g/10 min	2.20	g/10 min	ASTM D1238
Density, (23 °C)	0.920	g/cm³	0.920	g/cm³	ASTM D1505
Mechanical					
Tensile Stress at Break	1700	psi	11.7	MPa	ASTM D638
Tensile Stress at Yield	1500	psi	10.4	MPa	ASTM D638
Tensile Elongation at Break	600	%	600	%	ASTM D638
Thermal					
Vicat Softening Temperature	194	°F	90	°C	ASTM D1525
Low Temperature Brittleness, F_{50}	<-105	°F	<-76	°C	ASTM D746
Electrical					
Dielectric Constant, 1 MHz	2.29		2.29		ASTM D150
Dissipation Factor					
1 MHz	0.00008		0.00008		ASTM D150
2 GHz	0.00006		0.00006		LYB Method

Manufacturer website: https://www.lyondellbasell.com/en/

Notes

These are typical property values not to be construed as specification limits.

Processing Techniques

Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

General Extrusion Conditions

Petrothene NA951080, like other thermoplastic polyolefin resins, can be extruded using a conventional extruder. Below are suggested extrusion conditions for *Petrothene* NA951080. These conditions are intended as general guidelines only, and are not optimum values, since manufacturing variables such as extruder type and size have an effect on processing of thermoplastic resins.

Extruder Zone	Temperature Range	Extruder Zone	Temperature Range
Feed	280 - 300 °F (138 - 149 °C)	Adapter	400 - 425 °F (204 - 218 °C)
Zone 2	300 - 325 °F (149 - 163 °C)	Die	400 - 425 °F (204 - 218 °C)
Zone 3	375 - 400 °F (190 - 204 °C)	Melt Temperature	400 - 425 °F (204 - 218 °C)
Zone 4-X	400 - 425 °F (204 - 218 °C)		

Company Information

For further information regarding the LyondellBasell company, please visit http://www.lyb.com/.

© LyondellBasell Industries Holdings, B.V. 2026

Disclaimer

Information in this document is accurate to the best of our knowledge at the date of publication. The document is designed to provide users general information for safe handling, use, processing, storage, transportation, disposal and release and does not constitute any warranty or quality specification, either express or implied, including any warranty of merchantability or fitness for any particular purpose. Users shall determine whether the product is suitable for their use and can be used safely and legally.

In addition to any prohibitions of use specifically noted in this document, LyondellBasell may further prohibit or restrict the sale of its products into certain applications. For further information, please contact a LyondellBasell representative.

Trademarks

The Trademark referenced within the product name is owned or used by the LyondellBasell family of companies.