

Technical Data Sheet***Petrothene XL05480E***

W&C Polyolefin Compound

**Product Description**

Petrothene XL05480E is a colorable, non-halogenated, flame retardant compound crosslinkable via electron beam radiation.

Petrothene XL05480E is selected by customers for use in 125 °C automotive primary insulation (SAE J1128) constructions.

Regulatory Status

For regulatory compliance information, see *Petrothene XL05480E* [Product Stewardship Bulletin \(PSB\)](#) and [Safety Data Sheet \(SDS\)](#).

Status	Commercial: Active
Availability	Africa-Middle East; Asia-Pacific; Australia and New Zealand; Europe; North America; South & Central America
Application	Wire & Cable
Market	Wire & Cable
Processing Method	Wire & Cable

Typical Properties	Nominal Value	English Units	Nominal Value	SI Units	Test Method
Physical					
Density, (23 °C)	1.40	g/cm ³	1.40	g/cm ³	ASTM D1505
Mechanical					
Tensile Strength at Break, Initial	2000	psi	13.8	MPa	ASTM D412
Tensile Elongation at Break, Initial	200	%	200	%	ASTM D412

Notes

Properties determined from #20 AWG/TXL wire irradiated at 7.5 Mrads.

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

Processing Techniques

Users should determine the conditions necessary to obtain optimum product properties and suitability of the product for the intended application.

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 XL05480E, like other cross-linkable polyolefin compounds, can be extruded as wire and cable insulation by means of a conventional thermoplastic extruder. Crosslinking may be achieved by using electron beam radiation. Below are suggested extrusion and curing conditions for *Petrothene* XL05480E. These conditions are intended as general guidelines only, and are not optimum values, since manufacturing variables such as extruder type, size, and cable construction all have an effect on processing cross-linkable compounds.

<u>Extruder Zone</u>	<u>Temperature Range</u>	<u>Extruder Zone</u>	<u>Temperature Range</u>
Feed	265 - 275 °F (129 - 135 °C)	Adapter	295 - 305 °F (146 - 152 °C)
Zone 2	265 - 275 °F (129 - 135 °C)	Die	295 - 305 °F (146 - 152 °C)
Zone 3	265 - 275 °F (129 - 135 °C)	Head	305 - 315 °F (152 - 157 °C)
Zone 4-X	275 - 285 °F (135 - 141 °C)	Melt	340 - 360 °F (171 - 182 °C)

Additional Suggestions

- Single angle undersized die with little or no land.
- Die Cooling of 90 - 120 °F (32 - 49 °C) to control die drool.
- Suggested electron beam radiation dosage is 7.5 Mrads.

Material Handling

Pre-drying is typically not required. For additional handling information see the material's safety data sheet (SDS).

Company Information

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

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- (ii) film, overwrap and/or product packaging that is considered a part or component of one of the aforementioned medical devices;
- (iii) packaging in direct contact with a pharmaceutical active ingredient and/or dosage form that is intended for inhalation, injection, intravenous, nasal, ophthalmic (eye), digestive, or topical (skin) administration;
- (iv) tobacco related products and applications, electronic cigarettes and similar devices.
- (v) safety components in automotive applications, for example: air bags, air bag unit housings and covers, seat belt mechanisms, brake systems, pedals and pedal supports, steering systems.

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