

Technical Data Sheet

Petrothene YR19548

W&C Polyolefin Compound



Product Description

Petrothene YR19548 is a colorable, non-halogenated, flame retardant compound crosslinkable via electron beam radiation.

Petrothene YR19548 is selected by customers for use in 125 °C automotive primary insulation (SAE J1128) constructions.

Regulatory Status

For regulatory compliance information, see *Petrothene* YR19548 [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 YR19548, 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* YR19548. 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/>.

© LyondellBasell Industries Holdings, B.V. 2017

Disclaimer

Before using a product sold by a company of the LyondellBasell family of companies, users should make their own independent determination that the product is suitable for the intended use and can be used safely and legally.

SELLER MAKES NO WARRANTY; EXPRESS OR IMPLIED (INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY WARRANTY) OTHER THAN AS SEPARATELY AGREED TO BY THE PARTIES IN A CONTRACT.

Users should review the applicable Safety Data Sheet before handling the product.

This product(s) may not be used in the manufacture of any of the following, without prior written approval by Seller for each specific product and application:

- (i) U.S. FDA Class I or II Medical Devices; Health Canada Class I, II or III Medical Devices; European Union Class I or II Medical Devices;
- (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.

The product(s) may not be used in:

- (i) U.S. FDA Class III Medical Devices; Health Canada Class IV Medical Devices; European Class III Medical Devices;
- (ii) applications involving permanent implantation into the body;
- (iii) life-sustaining medical applications.

All references to U.S. FDA, Health Canada, and European Union regulations include another country's equivalent regulatory classification.

In addition to the above, LyondellBasell may further prohibit or restrict the use of its products in certain applications. For further information, please contact a LyondellBasell representative.

Trademarks

Adflex, Adstif, Adsyl, Akoafloor, Akoalit, Alastian, Alathon, Alkylate, Amazing Chemistry, Aquamarine, Aquathene, Avant, Catalloy, Clyrell, CRP, Crystex, Dexflex, Duopac, Duoprime, Explore & Experiment, Filmex, Flexathene, Fueling the power to win, Glacido, Hifax, Hiflex, Histif, Hostacom, Hostalen, Hyperzone, Ideal, Indure, Integrate, Koattro, LIPP, Lucalen, Luflexen, Lupolen, Luposim, Lupostress, Lupotech, Metocene, Microthene, Moplen, MPDIOL, Nerolex, Nexprene, Petrothene, Plexar, Polymeg, Pristene, Prodflex, Pro-fax, Punctilious, Purell, Refax, SAA100, SAA101, Sequel, Softell, Spherilene, Spheripol, Spherizone, Starflex, Stretchene, Superflex, TBAC, Tebol, T-Hydro, Toppyl, Trans4m, Tufflo, Ultrathene, Vacido and Valtec are trademarks owned and/or used by the LyondellBasell family of companies.

Adsyl, Akoafloor, Akoalit, Alastian, Alathon, Aquamarine, Avant, CRP, Crystex, Dexflex, Duopac, Duoprime, Explore & Experiment, Filmex, Flexathene, Hifax, Hostacom, Hostalen, Ideal, Integrate, Koattro, Lucalen, Lupolen, Metocene, Microthene, Moplen, MPDIOL, Nexprene, Petrothene, Plexar, Polymeg, Pristene, Pro-fax, Punctilious, Purell, Sequel, Softell, Spheripol, Spherizone, Starflex, Tebol, T-Hydro, Toppyl, Tufflo and Ultrathene are registered in the U.S. Patent and Trademark Office.

