

Irganox® 1520 L

Multifunctional phenolic antioxidant for processing and long-term thermal stabilization of elastomers, plastics and related products

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Characterization

Irganox® 1520 L is a multifunctional liquid phenolic antioxidant for organic substrates such as elastomers, plastics, adhesives, sealants, oils and lubricants. It effectively protects the substrate against thermooxidative degradation during processing and long-term heat aging. Irganox® 1520 L is non-staining, non-discoloring, low in volatility, and stable to light and heat. Irganox® 1520 L is specially recommended for emulsion and solution polymerized elastomers, such as BR, SBR, NBR, SBS and others.

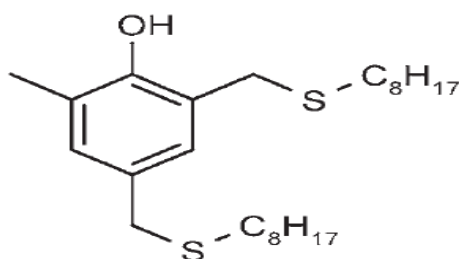
Chemical name

4,6-Bis(octylthiomethyl)-o-cresol

CAS number

110553-27-0

Structure



Molecular weight

424.7 g/mol

Applications

Irganox® 1520 L is an effective thermooxidative stabilizer in a wide range of solution polymerized, emulsion polymerized and thermoplastic elastomers including: BR, SBR, NBR, IR, SBS, and SIS as well as natural rubber. The antioxidant is effective both as a raw elastomer and compound stabilizer. It is also effective in various adhesive and sealant applications and latex applications. Irganox® 1520 L is not recommended for odor sensitive hot melt adhesives or their raw materials.

Features/benefits

Irganox® 1520 L is unique in its ability to provide both processing and longterm heat aging stability used alone, at low levels and without costabilizers. Where necessary Irganox® 1520 L can be used with other additives such as secondary antioxidants, benzofuranone, light stabilizers and other functional stabilizers. The effectiveness of these products in a wide range of elastomers coupled with extensive food contact approvals makes Irganox® 1520 L an excellent choice where consolidation of antioxidant systems is desirable. In addition, the liquid, low viscosity nature of Irganox® 1520 L makes bulk delivery and storage very convenient.

Product forms	Irganox® 1520 L	low viscous, pale yellow liquid
Guidelines for use	The normal usage levels for Irganox® 1520 L range between 0.05 % and 0.3 %. For special applications and, depending on substrate, manufacturing process and performance requirements, the optimal concentration may be as high as 1.0 % or even more. Extensive performance data for Irganox® 1520 L in various polymers and applications are available on request.	
Physical Properties	Melting range	~12 – 15° C
	Flashpoint	> 200 °C
	Vapor pressure (25 °C)	2 E-5 Pa
	Specific gravity (20 °C)	0.98 g/ml
	Dynamic viscosity (20 °C)	85 – 90 mPa.s
	Solubility (20° C)	g/100 g solution
	Acetone	> 50
	Chloroform	> 50
	Ethanol	> 50
	Ethyl acetate	> 50
	n-Hexane	> 50
	Methanol	> 50
	Methylene Chloride	> 50
	Toluene	> 50
	water	< 0.01
Handling & Safety	Detailed information on handling and any precautions to be observed in the use of the product(s) described in this leaflet can be found in our relevant safety data sheet.	
Note	<p>The descriptions, designs, data and information contained herein are presented in good faith and are based on BASF's current knowledge and experience. They are provided for guidance only, and do not constitute the agreed contractual quality of the product or a part of BASF's terms and conditions of sale.</p> <p>Because many factors may affect processing or application/use of the product, BASF recommends that the reader carry out its own investigations and tests to determine the suitability of a product for its particular purpose prior to use. It is the responsibility of the recipient of product to ensure that any proprietary rights and existing laws and legislation are observed. No warranties of any kind, either expressed or implied, including, but not limited to, warranties of merchantability or fitness for a particular purpose, are made regarding products described or designs, data or information set forth herein, or that the products, descriptions, designs, data or information may be used without infringing the intellectual property rights of others. Any descriptions, designs, data and information given in this publication may change without prior information. The descriptions, designs, data and information furnished by BASF hereunder are given gratis and BASF assumes no obligation or liability for the descriptions, designs, data or information given or results obtained, all such being given and accepted at the reader's risk.</p>	

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