



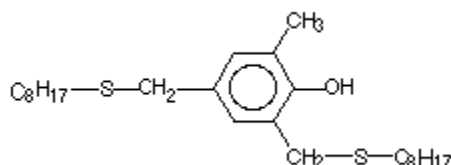
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Trade registration nr. 50769421 Chamber of Commerce Amsterdam

Technical Data Sheet

Product name: AO-1520
Product Form: Liquid, pale yellow
Chemical name: 4,6-bis(octylthiomethyl)-o-cresol
Synonym: 4,6-bis(octylthiomethyl)-6-methylphenol
CAS No: 110553-27-0
EC No: 402-860-6
Chemical formula: $C_{25}H_{44}OS_2$
Molecular weight: 424.7
Chemical Structure:



Specification

Appearance:	Oily clear liquid
Assay (%):	96.0 min.
Clarity of solution:	Clear solution
Transmittance:	
425 nm (%):	98 min.
Volatile (%):	0.1 max.

Characterization

AO-1520 is a multifunctional liquid phenolic antioxidant for organic substrates such as elastomers, plastics, adhesives, sealants, oils and lubricants. It effectively protects the substrate against thermo-oxidative degradation during processing and long-term heat aging. AO-1520 is nonstaining, non-discoloring, low in volatility, and stable to light and heat.

AO-1520 is specially recommended for emulsion and solution polymerized elastomers, such as BR, SBR, NBR, SBS and others.

Application

AO-1520 is an effective thermo-oxidative 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.

AO-1520 is not recommended for odor sensitive hot melt adhesives or their raw materials.

Features

AO-1520 is unique in its ability to provide both processing and long-term heat aging stability used alone, at low levels and without costabilizers. Where necessary AO-1520 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 AO-1520 an excellent choice where consolidation of antioxidant systems is desirable. In addition, the liquid, low viscosity nature of AO-1520 makes bulk delivery and storage very convenient.

Guidelines for uses

The normal usage levels for AO-1520 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.

Physical Properties

Melting Range	~ 14 °C
Flash point	> 200 °C
Density (20 °C)	0.98 g/cm ³
Vapor Pressure (25 °C)	2 E-5 Pa
Dynamic Viscosity (20 °C)	85 - 90 mPa.s
Solubility (20 °C)	% w/w
Water	< 0.01
Acetone	> 50
Chloroforme	> 50
Ethanol	> 50
Ethyl acetate	> 50
n-Hexane	> 50
Methanol	> 50
Methylene chloride	> 50
Toluene	> 50

Handling and Safety

In accordance with good industrial practice, handle with care and prevent contamination of the environment.

For more detailed information please refer to the material safety data sheet.

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