TECHNICAL DATA SHEET
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Innovative Chemistry for a Sustainable Future
India I Singapore I Brunei

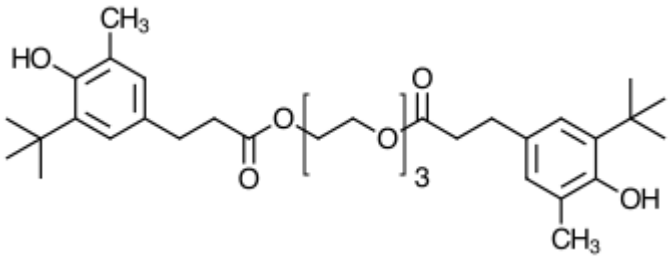
PUREstab 245

Phenolic Antioxidant for Processing and Long-Term Thermal Stabilization

Description

PUREstab 245 is a sterically hindered phenolic primary antioxidant particularly suitable for organic substrates. It stabilize the substrates against thermo-oxidative degradation during manufacturing, processing and end-use. It is of low volatility, has a good color stability and exhibits high extraction resistance.

Chemical Structure



Chemical name Triethylene glycol bis(3-tert-butyl-4-hydroxy-5-methylphenyl) propionate

CAS number 36443-68-2 **Molecular weight** 586.8

Features & benefits

PUREstab 245 provides excellent processing and long-term thermal stability to plastics especially when used in combination with phosphites and / or thioether antioxidants. The effectiveness of **PUREstab 245** with PUREfos 168 is noteworthy.

Application

PUREstab 245 is a highly effective antioxidant and process stabilizer in styrenic polymers (ABS, MBS, HIPS, and SB / SBR lattices), polyacetals, thermoplastic polyesters (especially PBT), polyamides, polyurethanes, PVC, other polymers, adhesives, and sealants. In addition to imparting thermostability to the finished polymer **PUREstab 245** is effective as chain stopper during PVC polymerization.

PUREstab 245 is also suitable for use in combination with light stabilizers, including hindered amine light stabilizers (HALS), UV absorbers, and benzoates. Recommended concentrations in plastics, adhesives, and sealants range from 0.05 to 0.1% but up to 1.0 % can be used depending on the substrate and the requirements of the end application.

Handling and safety

In accordance with good industrial practice, handle with care and avoid unnecessary personal contact. Avoid continuous or repetitive breathing of dust. Use only with adequate ventilation. Avoid dust formation and ignition sources. For more detailed information please refer to the material safety data sheet.

Storage

This product may be stored up to two years in a sealed container. Containers should be kept tightly closed when not in use and stored in a cool, dry place.

Physical Properties

Product form	White free flowing powder
Melting range	76 – 79°C
Flashpoint	>159°C

Density (20°C)	1.14 g/ml
Vapor pressure (20 °C)	4 E-8 Pa
Solubility (20°C) g/100g solution	
- Acetone	>50
- Chloroform	>40
- n-Hexane	<0.1
- Toluene	6
- Styrene	6
- Methanol	37
- Ethyl acetate	12
- Methylene Chloride	>40
- Water	0.01

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November' 2019