

Technical Information

www.addivant.com

Effective: April 2013

ULTRANOX® 626 phosphite

Phosphite Antioxidant

Description

ULTRANOX[®] **626 phosphite** is a high performance solid organophosphite antioxidant that contains no more than 1.0% by weight of Triisopropanolamine (CAS Number: 122-20-3).

Chemical Structure

Bis (2,4-di-t-butylphenyl) Pentraerythritol Diphosphite

Formula: $C_{33}H_{50}O_6P_2$

Chemical Abstract Number: 26741-53-7

$$(CH_{3})_{C} = \begin{array}{c} C(CH_{3})_{3} & C(CH_{3}$$

Applications

- Polyolefins
- Polyesters
- Styrenics
- Engineering thermoplastics
- PVC
- Elastomers
- Adhesives

Product Features

- Excellent color stability during compounding, fabrication and end use
- Reduction in polymer degradation during processing
- Improved gas fading performance in many applications
- High performance at low loading levels for more cost effective formulations
- Higher phosphorous content than competitive phosphite antioxidants
- Synergism when used with light stabilizers such as benzophenones and benzotriazoles

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Typical physical properties of ULTRANOX® 626 phosphite

Appearance	White Powder
Melt Point (capillary)	170-180°C (338-356°F)
Acid No. (mg KOH/g)	1.0 max.
Free 2, 4-di-t-butylphenol (%)	1.0 max
Phosphorous Content (%)	10.0-10.3
Triisopropanolamine Content (%)	0.5-1.0
Molecular Weight (g/mol)	604
Flash Point (Pensky-Martens Closed Cup)	168°C (335°F)
Bulk Density @ 20°C (68°F) lbs/ft³ (g/ml)	27.0 (0.43)
Particle Size Distribution 200	10% greater than 60 mesh, 50% less than mesh

Solubility @ 25°C / 77°F g/100 g solvent

Acetone	8.5	Hexane	4.8
Heptane	4.5	Methanol	1.9
Dichloro-Methane	43.0	Mineral Oil	10.0
Perchloroethylene	15.0	THF	35.0
Toluene	35.7	Water	Insoluble

^{*}Note: Solutions may be cloudy.

Dust Explosion Hazard

Minimum Ignition Temp. Dust Cloud	421°C / 790°F
Minimum Ignition Energy	200 mJ
Minimum Explosion Dust Cloud Concentration	0.035 oz/ft ³ 35 g/m ³
Index of Explosibility	0.37

Food Contact Regulatory Status

ULTRANOX[®] **626 phosphite** complies with 21 CFR 178.2010 for use in many polymers and with EU Directive 2002/72/EC. Consult the regulations for limitations/restrictions before use. For details please contact Addivant[™] Regulatory Affairs Polymer Additives.

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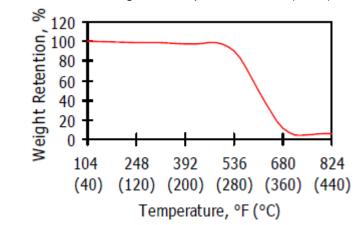
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Volatility By Thermal Gravimetric Analysis

Conditions: Nitrogen atmosphere @ 36°F (20°C)/minute



Storage and Handling

ULTRANOX[®] **626 phosphite** is stable in excess of one (1) year when stored under normal conditions in a cool, dry place away from any direct sources of heat and moisture.

For additional handling and toxicological information consult the Addivant[™] Material Safety Data Sheet.

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