ULTRANOX™ 627AV phosphite

Phosphite Antioxidant

Description

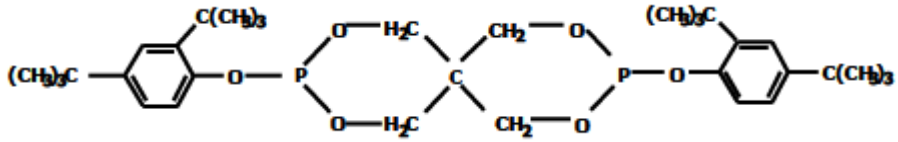
ULTRANOX™ 627AV phosphite is a high performance solid organophosphite antioxidant that contains no more than 1.0% by weight of Triisopropanolamine (CAS #122-20-3). **ULTRANOX™ 627AV phosphite** is a free-flowing version of **ULTRANOX™ 626 phosphite** with an inorganic neutralizer for improved handling characteristics.

Chemical Structure

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

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

Chemical Abstract Number: 26741-53-7/11097-59-9



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
- Total formulation costs can be lowered by substituting **ULTRANOX™ 627AV phosphite** for competitive solid antioxidant products
- Higher phosphorous content than competitive phosphite antioxidants

Typical physical properties of ULTRANOX™ 627AV phosphite

Appearance	White Granule
Melt Point (capillary)	Min 170°C - Max 180°C
Acid No. (mg KOH/g)	1.0 max.
Free 2, 4-di-t-butylphenol (%)	1.0 max.
Phosphorous Content (%)	9.1
DHT-4A (%)	6.0-8.0
Molecular Weight (g/mol)	604
Flash Point (Pensky-Martens Closed Cup)	>100°C
Melt Range (Differential Scanning Colorimeter)	160-175°C (320-347°F)
Bulk Density @ 20°C (68°F) lbs/ft^3 (g/ml)	32.0 (0.51)
Particle Size Distribution	95% greater than 60 mesh

Dust Explosion Hazard

Test performed on **ULTRANOX™ 626 phosphite**

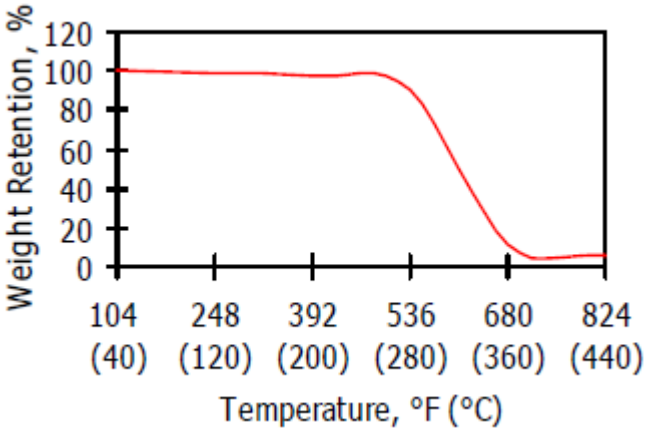
Minimum Explosible Concentration	15 g/m^3
Minimum Explosion Pressure (Bar)	7.5
Dust Explosion Class (ST-CL)	1
Minimum Ignition Energy	150 mJ
Minimum Ignition Temperature of Dust	370°C/700°F

Food Contact Regulatory Status

For details please contact SI Group Regulatory Affairs Group

Volatility By Thermal Gravimetric Analysis

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



Storage and Handling

ULTRANOX™ 627AV 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 SI Group Material Safety Data Sheet.