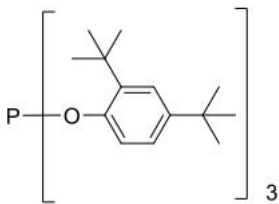


Antioxidant 168

Antioxidant 168 is a phosphite auxiliary antioxidant, commonly compounded with primary antioxidants 1010 and 1076. Suitable for PP, PE, PS, PA, and polyester, its low volatility makes it ideal for high-temperature thermoplastic processing. As a PP processing stabilizer, it inhibits thermal degradation with typical addition of 0.05–0.25%. Recommended dosage: 0.03–0.1% for HDPE; ≤0.1% for LDPE to avoid blooming. It suppresses processing yellowing in PA6/66, and works with primary antioxidants for long-term thermal & weather stabilization. Also applicable to PMMA, POM homopolymers, and copolymers. Product physicochemical properties.

1. Product physicochemical properties

1.1 Product basic information

Project	Content
Chemical name	Tris (2, 4-di-t-butylphenyl) phosphite
CAS number	31570-04-4
Molecular structure	
Formula weight	647

1.2 Technical specifications

Test item	Parameter
Appearance	White granules or powder
Melting range °C	183.0-187.0
Solubility	Limpid
Transmittance,% at 425 nm	≥98.0
Transmittance,% at 500 nm	≥98.0
Dry weight reduction %	≤0.3
Ash content %	≤0.1
Acid value (mg KOH/g)	≤0.30
Water resistance	Qualified
2,4-di-tert-butylphenol, %	≤0.2
Main component %	≥99.0

1.3 Solubility (20 °C, g/100 mL solvent)

Solvent	Solubility
Dichloromethane	36g
N-hexane	11g
Chloroform	36g
Acetone	1g
Water	<0.01g
Methylbenzene	30g

Solvent	Solubility
Alcohol	0.1g
Ethyl acetate	4g
Cyclohexane	16g
Methanol	< 0.01g

2. Operation and safety

1. This product is a general-purpose plastic additive; it can be handled in accordance with standard chemical raw material operating procedures;
2. Avoid generating large amounts of dust; ensure the workshop is well-ventilated and kept away from open flames and high-temperature heat sources;
3. Personal protection: Wear a dust-proof mask and nitrile protective gloves;
4. For complete information on emergency response, leakage handling, storage, and transportation, and hazards, please refer to the accompanying SDS safety data sheet.

3. Storage and transportation

1. Store in a cool, dry, and well-ventilated warehouse; avoid direct sunlight, exposure to rain, or moisture.
2. Store separately from strong oxidizing agents, strong acids, and strong alkalis;
3. The original factory-sealed product has a shelf life of 12 months at room temperature; once opened, it should be used as soon as possible to prevent moisture absorption and clumping.