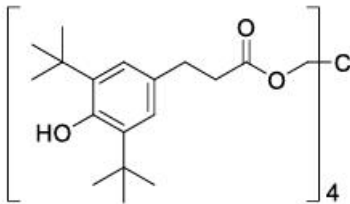


Antioxidant 1010

Antioxidant 1010 is a hindered phenolic high-molecular-weight antioxidant characterized by its high efficiency, low volatility, and excellent compatibility with substrates. It is widely recognized as one of the superior antioxidant varieties internationally and is typically formulated in combination with auxiliary antioxidants. It is primarily used in various polymer materials such as general-purpose plastics, engineering plastics, rubber, elastomers, and adhesives. It provides long-term thermal stability to these materials while also serving as a highly effective processing stabilizer.

1. Product physicochemical properties

1.1 Product basic information

Project	Content
Chemical name	Tetrakis [β -(3,5-di-tert-butyl-4-hydroxyphenyl) propionic acid] pentaerythritol ester
CAS number	6683-19-8
Molecular structure	
Formula weight	1178

1.2 Technical parameter

Test item	Parameter
Appearance	White granules or powder
Melting range °C	110-125
Solubility	Limpid
Transmittance,% at 425 nm	≥96.0
Transmittance,% at 500 nm	≥98.0
Heating loss %	≤0.5
Ash content %	≤0.1
Main component %	≥94.0
Active ingredient content %	≥98.0
Tin content	≤2 × 10 ⁻⁴

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

Solvent	Solubility
Dichloromethane	63g
N-hexane	0.3g
Chloroform	71g
Acetone	47g
Water	<0.01g
Methylbenzene	60g
Alcohol	2g

Solvent	Solubility
Ethyl acetate	2g
Methanol	0.9g

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 24 months at room temperature; once opened, it should be used as soon as possible to prevent moisture absorption and clumping.