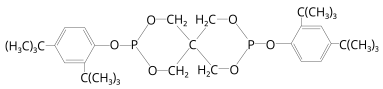
YFK-626

Chemical Structure

Chemical Name	Bis-(2,4-Di-Tert-Butyl-Pheny)-Phosphiterythritol Diphosphite
Chemical Formula	$C_{33}H_{50}O_6P_2$
Cas No.	26741-53-7
Molecular Weight	604



Specifications

Appearance	White powder or particle
Melting Range (°C)	170 ~ 180
Volatile Loss (80°C) %	<= 1.0
Acidity Value (mgKOH/g) %	<= 1.0
Free 2,4-Di-Tert-Butylphenol (HPLC) %	<= 1.0
Active Ingredient Content	>= 98.0
Main Content (HPLC) %	>= 96.0

Usage Notes

Properties	It is readily soluble in organic solvents such as benzene, chloroform, and cyclohexane, and slightly soluble in phenolic compounds, but insoluble in water and cold alcohols. It is low in toxicity, exhibits good thermal stability and water extraction resistance, and effectively decomposes hydrogen peroxide formed during the thermal processing of polymers.

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Performance	It is a high-performance phosphite antioxidant optimized for high-temperature applications exceeding 300 °C. The material provides outstanding processing stability, color retention, and light stability, making it particularly suitable for polymers subjected to repeated high-temperature extrusion and molding. It is widely applied in polyolefins (PE, PP), PBT, PET, polypropylene spinning, and other resins requiring high-temperature resistance and color protection. YFK-626 enhances polymer stability during compounding, processing, and end use, reduces thermal and oxidative degradation, and improves anti-fading performance under flue gas exposure. With a higher phosphorus content than conventional phosphite antioxidants, it offers superior efficiency at low dosage and can also act as a synergistic light stabilizer in combination with benzotriazole or benzophenone.
Applications	It is typically not used as a standalone additive but in combination with phenolic antioxidants such as YFK-1010 and YFK-1076, where it significantly enhances the thermal stability of polymers during processing. The additive is widely applicable to PE, PP, PS, polyamide, polycarbonate, ABS, and other polymer systems.
Storage	This product is stable under normal conditions and does not have any special storage requirements. However, it should be protected from moisture and heat.
Recommended Dosage	The typical dosage range is 0.05% to 0.20%.
Packaging	The product is packaged in cardboard boxes lined with aluminum foil bags. The net weight per box is 25 kg. The pallet is wrapped, with a net weight of 500 kg.