



YFK-4001

Specifications

Appearance	White powder
Melting Range (°C)	93.0 ~ 98.0
Volatile Loss %	<= 0.5

Usage Notes

Properties

It is a white powder, insoluble in water, cold alcohol, and most common organic solvents, but slightly soluble in esters. The material is low in toxicity and exhibits good thermal stability along with resistance to water extraction. During polymer thermal processing, it effectively scavenges carbon radicals, hydroperoxides, and quinone compounds.

Performance

It is a high-temperature phosphite antioxidant designed for processing under high and super-high temperature conditions. It provides excellent processing stability, strong color retention, and good light stability, thereby maintaining and enhancing the original tone of polymers while improving processing performance. In addition to protecting polymers from degradation, YFK-4001 penetrates polymer particles to deliver extended stabilization. It is widely applied in polyolefins (PE and PP), PBT, PET, and other resins requiring high-temperature resistance and color protection, and is especially effective in plastic products exposed to repeated high-temperature extrusion and processing. The additive enhances polymer stability during compounding, production, and end use, reduces thermal and oxidative degradation, and improves resistance to flue gas-induced fading. Offering high performance at low dosage, YFK-4001 enables efficient formulation. Compared with conventional phosphite antioxidants, it demonstrates superior thermal stability.

Applications

It is generally not used as a standalone additive but is typically combined with phenolic and phosphite antioxidants such as Antioxidants 330, 1010, 1076, 3114, 168, and 626. In such synergistic systems, it enhances polymer stability during thermal processing. When compounded with phenolic antioxidants, it is widely applicable to PE, PP, PS, polyurethane, polycarbonate, ABS, and other polymer materials.

Storage

This product is chemically stable; however, exposure to moisture, heat, and light should be avoided. The product must not be stored together with oxidizing agents.

Recommended Dosage

The typical dosage range is 0.01% to 0.20%.



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Packaging

The product is packaged in cardboard boxes lined with aluminum foil bags. The net weight per box is 25 kg.
