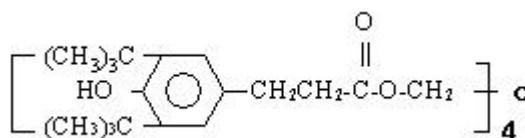




Primary Antioxidant 1010

- **Chemical Name:** Pentaerythrityl Tetra- β -(3,5-di-*tert*-butyl,4-hydroxyphenyl)-propionate]
- **Molecular Weight:** M=1177.65
- **CAS No.:**6683-19-8
- **Molecular Formula:** C₇₃H₁₀₈O₁₂
- **Chemical Structure Formula:**



- **Typical Physical Properties: HG/T 3713-2003**

Item		Standard
Appearance		White Powder
Melting Range (°C)		110~125
Volatile (%)		≤ 0.5
Solubility (2g/20ml, Toluene)		Limpidity
Light Transmittance	425nm, %	≥ 96
	500nm, %	≥ 98
Ash Content (%)		≤ 0.1
Effect Component (%)		≥ 98
Purity (%)		≥ 94

- **Features:** The product is white crystalline powder, soluble in such organic solvents as benzene, toluene, chloroform and so on, slight soluble in alcohol, but insoluble in water. No transport or no frost spray when added to the products because of its volatility. Little toxicity and its half lethal dose (for a white mouse is only LD50≥15000mg/kg). Many countries, such as U.S.A., have approved it used as packing material for food.
- **Applications:** The product is the typical representative of hindered phenol antioxidants, non-poisonous, nondiscolouring as well as nonstaining and is an excellent top-quality approved in international. It is widely used in a variety of polymer materials, such as polypropylene, polyethylene, polyester, polyurethane, polystyrene, polyoxymethylene, PBT, ABS, polyamide, synthetic rubber and so on. It is also a high grade antioxidant for natural and synthetic oil.





- **Storage:** Stable in property. No special requirement but keep ventilation and away from water and high temperature.
- **Packing:** It is packed in cardboard box lined with plastic bags with the net capacity of 25 kg ;or It is packed in three-in-one compound bags.The inner layer is plastic film,and the outer is polypropylene braided lining kraft paper bags with the net weight of 25kg. It can also be designed according to customers' requirements.
- **Recommended Dosage:** 0.1-0.3%

Notice: Melting point normally shows the purity of a substance in a way, the smaller the melting range is, the higher the purity of a substance is. But 1010 has many types of aciculas. Among them, α type β , whose melting point is at 120-125°C, and β type, whose melting point is at 110-115°C. The product which is sold in the markets is the mixture of α type and β type. But the mixing ration will not affect the antioxidant feature of the products. The latest research result shows that 1010 has γ type, λ type and unfined aciculas besides type α and β type.

