

Technical Data Sheet

PENTAERTHRYTOL POWDER



Product Character

Appearance	White powder
Molecular mass	136.2 gm/mol
Melting point	257 °C
Bulk Denisty	~600:750 kg/m ³
Odour	Characteristic

Product Description

Pentaerythritol is a white crystalline polyhydric alcohol widely used in the manufacture of alkyd resins, synthetic lubricants, plasticizers, explosives, coatings, adhesives, and stabilizers.

It provides excellent thermal stability, low volatility, and high functionality due to its four hydroxyl groups.

Application

Alkyd resins
Liquid polyesters
Radiation curing monomers
Polyurethane pre-cursors
Synthetic Lubricant esters
Rosin Esters

Storage and Handling

- Store in a cool, dry, well-ventilated area.
- Keep containers tightly closed.
- Protect from moisture and direct sunlight.
- Keep away from strong oxidizing agents.

Key Features & Benefits

- High-functionality polyol with four hydroxyl groups for efficient crosslinking and strong polymer structures.
- Excellent thermal and chemical stability for long-term performance.
- Low volatility and high melting point reducing VOCs and improving processing stability.
- High purity ensuring consistent reaction performance and product quality.
- Enhances hardness, gloss, durability, and weather resistance in coatings and resins.
- Improves oxidation resistance and thermal endurance in synthetic esters and lubricants.
- Compatible with various resin and solvent systems for flexible formulation.

Shelf life

- Shelf life: 24 months under recommended storage conditions

Safety

- Use appropriate PPE (gloves, goggles, dust mask).
- Avoid dust inhalation and prolonged skin contact.
- Handle in well-ventilated areas.
- Avoid generation of airborne dust.