ENSTMAN

Technical Data Sheet Eastman[™] Purified Terephthalic Acid (EPTA)

Applications

- Adhesives/sealants-b&c
- Architectural coatings
- Auto oem
- Automotive
- Coil coatings
- General industrial coatings
- Graphic arts
- Intermediates
- Paints & coatings
- Protective coatings
- Water packaging

Wind energy

Key Attributes

- Excellent weathering
- Good chemical and stain resistance
- Good hardness/flexibility balance
- Ideal glass transition temperature range
- Outstanding powder flow and fluidization characteristics

IUPAC: 1,4-benzenedecarboxylic acid

Product Description

Eastman[™] Purified Terephthalic Acid (PTA) is used to manufacture polyester coatings resins for use in the formulation of general metal, appliance, automotive, industrial maintenance, and coil coatings. The primary application for PTA is in combination with Eastman NPG[™] Glycol in polyester powder coating resins. It has also been used in unsaturated polyesters for fiberglass-reinforced plastics applications.

The aromatic ring of PTA imparts excellent hardness and corrosion and stain resistance to coatings resins and unsaturated polyesters. PTA has moderate solubility in molten glycols which can increase synthesis times, and it imparts moderate solubility to resins.

Eastman[™] PTA is only available in the United States in bulk quantities.

Typical Properties

Property	Test Method	Typical Value, Units
General		
Molecular Weight		166.14
Empirical Formula		C ₈ H ₆ O ₄
Appearance		White Powder
Odor		Odorless
4-Carboxybenzaldehyde (4-CBA)		200 ppm max.
Volatiles		0.12 wt % max.
Cobalt		10 ppm max.
Melting Point ^a		>300 °C (>572 °F)
Acid Number (mg KOH/g)		675
Color		
CIE b*		5.3 max.
Solubility		
in Water		Negligible
Specific Gravity		
@ 15°C		1.51





Flash Point		
Cleveland Open Cup		271 °C (519.8 °F)
Autoignition Temperature	ASTM D 2155	496 °C (924.8 °F)
Chemical Inventory Listings		TSCA (USA), EINECS (JAPAN)

^aSublimes

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