

Technical Data Sheet

Eastman NPG™ (Molten)

Chemical Synonym

Neopentyl Glycol

Applications

- Auto oem
- Coil coatings
- Protective coatings

Key Attributes

- Excellent thermal stability for low resin color
- Excellent weathering
- Good chemical and stain resistance
- Good chemical, stain, and humidity resistance
- Good hardness/flexibility balance
- Ideal glass transition temperature range
- Outstanding powder flow and fluidization characteristics
- Outstanding weathering
- Rapid reactivity during esterification and cure

Product Description



UPAC: 2,2-Dimethyl-1,3-Propanediol

Eastman NPG glycol is the industry standard glycol component in high-quality polyester resins for industrial coatings and fiberglass-reinforced plastics applications. Most polyester resin formulations contain NPG as the sole glycol component, or it is used in conjunction with a modifying glycol to achieve desired properties.

NPG and Eastman PTA (Purified Terephthalic Acid) are the primary components for polyester powder coating resins. Eastman NPG delivers the overall toughness, stain and detergent resistance, and outdoor weathering performance required of coil coatings for appliances and products for exterior applications. Gel coats containing unsaturated polyesters made from NPG and Eastman PIA (Purified Isophthalic Acid) provide excellent weatherability and water and stain resistance.

Eastman NPG is also used in polyester polyols for polyurethane coatings for the automotive, industrial maintenance, transportation, and aerospace markets.

In the United States, neopentyl glycol may be lawfully used as a reactant for coatings and other products intended for use in contact with foods under specific federal food additive regulations.

Eastman NPG glycol is available in three forms:

- Platelets in bags that exhibit excellent caking stability on storage.
- Bulk molten shipped in tank trucks that require a heated tank for storage.
- Eastman NPG 90 glycol, a liquid at or above 38°C containing 90 parts NPG and 10 parts water, is delivered in bulk and can be stored at a much lower temperature than molten NPG.

Typical Properties

Property	Typical Value, Units
General	
Molecular Weight	104.15
Empirical Formula	C ₅ H ₁₂ O ₂
Assay	99.0 wt % min.
Water	0.5 wt % max.

Appearance	
@ 150°C (302°F)	Clear colorless liquid
@ 25°C (77°F)	White solid
Color (50% Aqueous Solution), Pt-Co Scale	15 max.
Specific Gravity	
@ 25°C	1.06
Freezing Point	124-130 °C (255-266 °F)
Boiling Point	
@ 25 mm Hg	122 °C (252 °F)
@ 3.4 mm Hg	93 °C (199 °F)
@ 760 mm Hg	210 °C (410 °F)
Flash Point	
Tag Closed Cup	109 °C (228 °F)
Autoignition Temperature	388 °C (730 °F)
Effects on Metals ^a	No corrosive effect on mild steel or tin plate.

^aSlightly corrosive to aluminum.

Comments

Properties reported here are typical of average lots. Eastman makes no representation that the material in any particular shipment will conform exactly to the values given.

Eastman and its marketing affiliates shall not be responsible for the use of this information, or of any product, method, or apparatus mentioned, and you must make your own determination of its suitability and completeness for your own use, for the protection of the environment, and for the health and safety of your employees and purchasers of your products. No warranty is made of the merchantability of fitness of any product, and nothing herein waives any of the Seller's conditions of sale.

11/7/2019 10:07:40 AM