



INTRODUCTION

NPG(PO)₂DA, neopentyl glycol propoxylate diacrylate, is useful as a reactive diluent in formulating ultraviolet light (UV) and electron beam (EB) curable coatings and inks. NPG(PO)₂DA provides efficient viscosity reduction of viscous resins, good flow and wetting, and greater flexibility than other common difunctional acrylate diluents.

PERFORMANCE HIGHLIGHTS

NPG(PO)₂DA is characterized by:

- Low viscosity
- Light color
- Low surface tension
- Reduced skin irritation potential
- Good pigment wetting

UV/EB curable coatings and inks containing NPG(PO)₂DA typically demonstrate:

- Increased flexibility
- Improved flow and wetting
- Good cure speed without brittleness
- Improved adhesion to plastic substrates

The actual properties of UV/EB cured products also depend on the selection of the formulation components such as oligomers, additives and photo initiators.

SUGGESTED APPLICATIONS

NPG(PO)₂DA finds utility in UV/EB curable coatings and inks requiring good flow-out, increased flexibility and substrate or pigment wetting.

- Vinyl floor coatings
- Release coatings
- Laminating and pressure sensitive adhesives
- Flexo inks
- Pigment grind vehicles
- Wood topcoats

SPECIFICATIONS

Acid value, mg KOH/g	max. 0.7
Appearance	Clear liquid
Color, Apha	max. 100
Inhibitor (MEHQ), ppm	200 - 400
Residual solvent, wt. %	max. 0.1
Viscosity, 25°C, mPa.s	10 - 20
Water, wt. %	max. 0.15

TYPICAL PHYSICAL PROPERTIES

Density, g/cm ³ at 25°C	1.007
Flash point, Setflash, °C	> 100
Surface tension, dynes/cm	32
Vapor pressure at 25°C, mm Hg	< 0.001

PRECAUTIONS

Before using DPGDA, see the Safety Data Sheet (SDS) for information on the identified hazards of the material and the recommended personal protective equipment and procedures.

STORAGE AND HANDLING

Care should be taken not to expose the product to high temperature conditions, direct sunlight, ignition sources, oxidizing agents, alkalis or acids. This might cause uncontrollable polymerization of the product with the generation of heat. Storage and handling should be in stainless steel, amber glass, amber polyethylene or baked phenolic lined containers. Procedures that remove or displace oxygen from the material should be avoided. Do not store this material under an oxygen free atmosphere. Dry air is recommended to displace material removed from the container. Wash thoroughly after handling. Keep container tightly closed. Use with adequate ventilation.

See the SDS for the recommended storage temperature range for DPGDA.