TECHNICAL DATASHEET

DPGDA

Dipropylene Glycol Diacrylate

February 2017



INTRODUCTION

Dipropylene glycol diacrylate (DPGDA) is a difunctional reactive diluent that polymerizes when exposed to sources of free radicals. DPGDA is particularly useful in coatings and inks where improved flexibility and adhesion are desired in combination with good moisture resistance.

PERFORMANCE HIGHLIGHTS

DPGDA is characterized by:

- · Low viscosity
- · Good diluency
- · Light color

UV/EB curable formulated products containing DPGDA are characterized by:

- · Improved flexibility
- · Good cure response
- Improved adhesion on plastics, wood, and some metals

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

SUGGESTED APPLICATIONS

DPGDA is recommended as a reactive diluent for UV/EB cured inks and coatings where improved adhesion or increased flexibility are desired, such as:

- · Wood coatings
- · Coatings and inks for flexible and rigid plastics

| SPECIFICATIONS | VALUE |
|--|-------|
| Acid Value, mg KOH/g, max. | 0.4 |
| Appearance | Clear |
| Color, Pt-Co scale ⁽¹⁾ ,max | 60 |
| Residual Solvent, %, max. | 0.09 |
| Viscosity at 25°C, cP/mPa·s | 5-15 |
| Water, wt. %, max. | 0.1 |

TYPICAL PHYSICAL PROPERTIES

| Density, g/ml at 25°C | 1.06 |
|-------------------------------|--------|
| Flash Point, Setaflash, °C | >100 |
| Formula weight | 242 |
| Melting Point, °C | <0 |
| Vapor pressure, mm Hg at 20°C | < 0.03 |

CHEMICAL ABSTRACT SERVICE NUMBER

57472-68-1

2-Propenoic acid, oxybis(methyl-2,1-ethanediyl) ester

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.

Please refer to the allnex Guide to Safety and Handling of Acrylate Oligomers and Monomers for additional information on the safe handling of acrylates.

(1) Also referred to as APHA color.

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