

### **TECHNICAL DATA SHEET**

## **Energy Curable Resins**

# **OTA-480**

## **Propoxylated Glycerol Triacrylate**

 $x + y + z \sim 3.5$ 

#### **INTRODUCTION**

OTA-480 is a triacrylate reactive diluent based on a glycerol derivative. It exhibits low viscosity and good flexibility for a triacrylate and its high functionality contributes to good reactivity and hardness.

#### **PERFORMANCE HIGHLIGHTS**

OTA-480 is characterized by:

- Low viscosity
- · Light color
- Low odor
- Excellent reduction of oligomer viscosity

UV/EB curable formulated products containing OTA-480 are characterized by:

- Good cure response
- Good flexibility
- · Excellent hardness

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

OTA-480 is recommended as a reactive diluent for UV/EB cured inks and varnishes, especially where fast cure speed, high cross-link density and lower irritancy are desired.

SPECIFICATIONS	VALUE
Acid value, mg KOH/g, max.	0.4
Appearance	Clear liquid
Color, Pt-Co scale <sup>(1)</sup> , max.	60
Residual solvent, wt. %, max.	0.09
Viscosity, 25°C, mPa·s/cP	70-110
Water, wt. %, max.	0.1

#### **TYPICAL PHYSICAL PROPERTIES**

Density, g/ml at 25°C	1.08
Flash point, Setaflash, °C	>100
Formula weight	~456
Melting point, °C	<0
Vapor pressure, mm Hg at 20°C	<0.01

#### **CHEMICAL ABSTRACT SERVICE NUMBER**

52408-84-1

Poly[oxy(methyl-1,2-ethanediyl)], alpha, alpha', alpha"-1,2,3-propanetriyltris [omega-[(1-oxo-2-propenyl)oxy]]-

#### STORAGE AND HANDLING

Before using OTA-480, consult the Safety Data Sheet for additional information on safety and handling procedures, and recommended personal protective equipment.

The recommended storage temperature for OTA-480 is 4°C to 40°C (39°F to 104°F). 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. This material should not be stored for more than 2 years.

#### **PRECAUTIONS**

Avoid contact with eyes, skin and clothing. Direct contact with this material may cause serious eye irritation. Repeated or prolonged dermal contact may cause allergic skin reactions. Wash thoroughly after handling. Use with adequate ventilation. Keep container closed.

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

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