EBECRYL® 53

Propoxylated Glycerol Triacrylate

March 2017



 $x + y + z \sim 3.5$

INTRODUCTION

EBECRYL 53 is a purified grade of OTA 480, especially developed for formulating ultraviolet light (UV) and electron beam (EB) curable printing inks and overprint varnishes for food packaging applications. The purification process removes impurities that are potential sources for odor and extractables in cured products.

PERFORMANCE HIGHLIGHTS

EBECRYL 53 is characterized by:

- Low viscosity
- Light color
- · Very Low odor
- · Excellent reduction of oligomer viscosity
- Low irritancy
- · Good pigment wetting

UV/EB curable formulated products containing EBECRYL 53 are characterized by:

- Good cure response
- · Good flexibility
- · Excellent hardness
- · Very low odor

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

EBECRYL 53 is recommended as a diluent for UV/EB cured inks and varnishes, especially where lower odor and irritancy are desired.

SPECIFICATIONS	VALUES
Acid value, mg KOH/g, max.	0.4
Acrylic Acid, ppm, max.	200
Appearance	Clear liquid
Color, Pt-Co scale ⁽¹⁾ , max.	60
Residual solvent, ppm, max.	10
Viscosity, 25°C, cP/mPa·s	70-110
Water, %, max.	0.1

TYPICAL PHYSICAL PROPERTIES

Density, g/ml at 25°C	1.08
Flash point, Setaflash, °C	>100
Formula weight	428
Melting point, °C	<0
Vapor pressure, mm Hg at 20°C	<0.01

CHEMICAL ABSTRACT SERVICE NUMBER

52408-84-

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

PRECAUTIONS

Before using EBECRYL 53, 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 EBECRYL 53.

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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