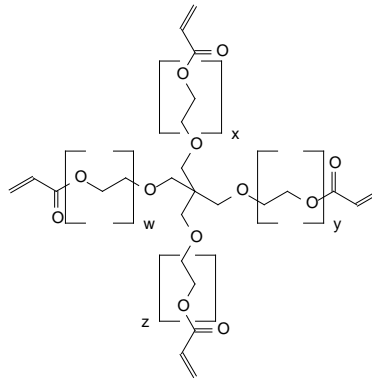


EBECRYL® 50

Ethoxylated Pentaerythritol Tetraacrylate

May 2017



$$w+x+y+z = 5$$

INTRODUCTION

EBECRYL 50 is the tetraacrylate ester of 5 mole ethoxylated pentaerythritol. It is a low viscosity diluting oligomer characterized by low odor and light color. EBECRYL 50 provides fast cure response in ultraviolet light (UV) or electron beam (EB) cured coatings and inks. Besides its high reactivity, EBECRYL 50 improves the hardness and solvent resistance of cured coatings and inks. EBECRYL 50 is particularly useful in offset inks, flexo inks and overprint varnishes.

PERFORMANCE HIGHLIGHTS

EBECRYL 50 is characterized by:

- Light color
- Low viscosity
- Low odor

UV/EB cured products based on EBECRYL 50 are characterized by the following performance properties:

- Good cure response
- High surface hardness
- Good solvent resistance
- Low residual odor
- Low impurity profile

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

SUGGESTED APPLICATIONS

Formulated UV/EB curable products containing EBECRYL 50 may be applied by offset, flexo, screen, gravure, direct or reverse roll, and curtain coating methods.

EBECRYL 50 is recommended for use in:

- Offset and flexo inks as a reactive diluting acrylate
- Overprint varnishes
- Coatings on paper, plastics, cardboard
- Paper upgrading

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TYPICAL PHYSICAL PROPERTIES

TYPICAL PHYSICAL PROPERTIES	VALUE
Color, Pt-Co scale.	<100
Density, g/ml at 25°C	1.15
Functionality, theoretical	4
Molecular weight, theoretical	572
Viscosity, 25°C, cP/mPa-s	150-200

PRECAUTIONS

Before using EBECRYL 50, 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 50.

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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