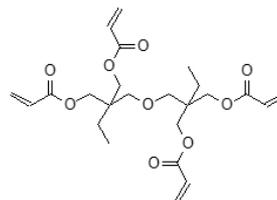


PURIFIED DITRIMETHYLOLPROPANE TETRAACRYLATE



INTRODUCTION

EBECRYL® 1141 is purified ditrimethylolpropane tetraacrylate having a reduced content of residual components. The use of EBECRYL® 1141 in ultraviolet light (UV) and electron beam (EB) curable coatings and inks can provide low residual odor and potential extractables along with substantial improvements in cure response, hardness, chemical, scratch, and abrasion resistance. EBECRYL® 1141 is particularly effective for lithographic offset inks and overprint varnishes.

PERFORMANCE HIGHLIGHTS

EBECRYL® 1141 is characterized by:

- Low odor
- Light color
- Low irritancy
- Good cure response

UV/EB cured products based on EBECRYL® 1141 are characterized by the following performance properties:

- Low residual odor
- Reduction of potential extractables
- Flexibility while retaining hardness
- High abrasion resistance
- Good chemical resistance

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

SUGGESTED APPLICATIONS

EBECRYL® 1141 is recommended for use in coatings and inks requiring low residual content and reduction of potential extractables when formulated with other purified products and additives. EBECRYL® 1141 is a reactive diluent that is compatible with a wide range of acrylated resins used in UV/EB curing applications. Effective levels of EBECRYL® 1141 typically range from 10% to 30%, depending on the application. In lithographic inks and varnishes it is quite effective in adjusting viscosity while maintaining or improving cure response and physical properties. The high functionality of EBECRYL® 1141 provides increased crosslink density in UV/EB cured coatings and inks, which can help improve gloss, hardness, and durability.

SPECIFICATIONS

Acid value, mg KOH/g	max. 1.0
Appearance	Clear liquid
Color, Apha	400
Residual solvent, ppm	max. 10
Viscosity at 25°C, mPa.s	800 - 1200

TYPICAL PROPERTIES

Acrylic acid, ppm	< 200
Density, g/cm ³ at 25°C	1.10
Flash point, Setaflash, °C	> 100
Formula weight	466
Functionality, theoretical	4
Hydroxyl value, mg KOH/g	< 30

PRECAUTIONS

Before using EBECRYL® 1141, 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® 1141.