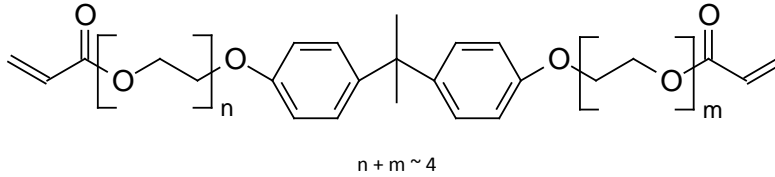


# EBECRYL® 150

Bisphenol A Ethoxylate Diacrylate

March 2017



## INTRODUCTION

EBECRYL 150 is an ethoxylated bisphenol A diacrylate commonly used as reactive diluent in UV/EB cure applications. EBECRYL 150 can improve the cure response, hardness, and chemical resistance of UV/EB curable coatings and inks while maintaining good adhesion, and without imparting brittleness.

## PERFORMANCE HIGHLIGHTS

EBECRYL 150 is characterized by:

- High reactivity
- Moderate viscosity
- High refractive index

UV/EB curable formulated products containing EBECRYL 150 are characterized by:

- Hardness
- Chemical resistance
- Good adhesion
- Improved wetting

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 150 is recommended as a reactive diluent for UV/EB cured offset inks, silk screen inks, overprint varnishes and coatings. Effective levels of EBECRYL 150 typically range from 10% to 50% depending on the application. EBECRYL 150 is recommended for use in:

- Printing inks
- Low viscosity, high refractive index coatings

## SPECIFICATIONS

	VALUE
Acid value, mg KOH/g, max.	5
Appearance	Clear liquid
Color, Gardner scale, max.	2
Viscosity, 25°C, cP/mPa·s	1150-1650

## TYPICAL PHYSICAL PROPERTIES

Density, g/ml at 25°C	1.14
Flash point, Setaflash, °C	>100
Functionality, theoretical	2
Refractive index ( $n_D$ at 20°C)	1.5294
Vapor pressure, mm Hg at 20°C	<0.01

## TYPICAL CURED PROPERTIES<sup>(1)</sup>

Tensile strength, psi (MPa)	6300 (43)
Elongation at break, %	9
Young's modulus, psi (MPa)	180000 (1241)
Glass transition temperature, °C <sup>(2)</sup>	41

(1) UV cured 125  $\mu$  thick films.

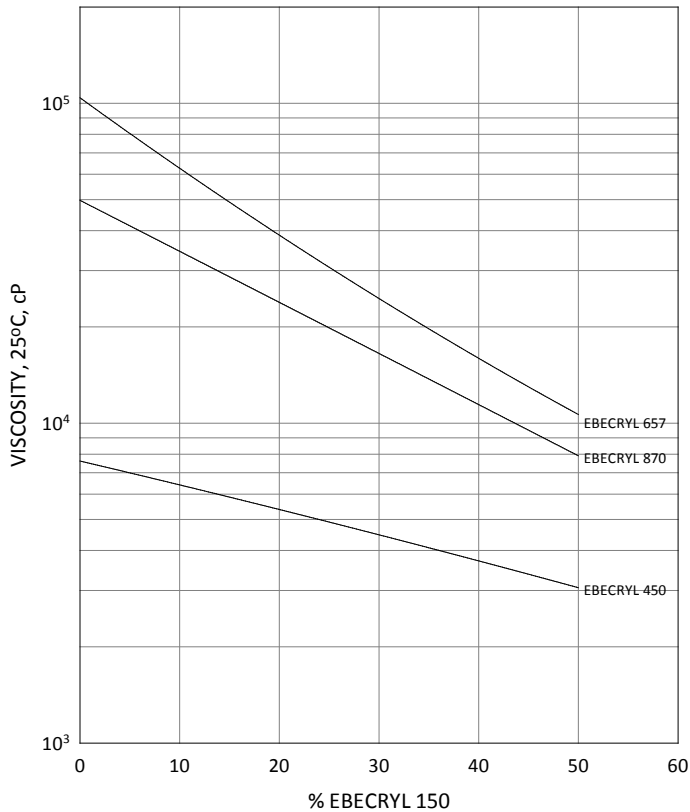
(2) Determined by Dynamic Mechanical Analysis

## VISCOSITY REDUCTION

Graph I shows the viscosity reduction of the lithographic ink vehicles EBECRYL 450<sup>(1)</sup>, EBECRYL 657<sup>(1)</sup> and EBECRYL 870<sup>(1)</sup> when blended with EBECRYL 150.

### GRAPH I

#### DILUTION EFFECT OF EBECRYL 150 ON VISCOUS OLIGOMERS



## PRECAUTIONS

Before using EBECRYL 150, 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 150.

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) Product of allnex

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