

DILUTED POLYESTER OLIGOMER

INTRODUCTION

EBECRYL® 444 is a chlorinated polyester resin diluted with 40% of propoxylated glycerol triacrylate (OTA480). EBECRYL® 444 exhibits good wet lithographic behaviour and pigment wetting properties. UV (ultraviolet light) cured films based on EBECRYL® 444, display good adhesion to metals, plastics and paper.

SUGGESTED APPLICATIONS

UV/EB curable formulations containing EBECRYL® 444 may be applied by lithographic, screen, gravure, direct or reverse roll, and curtain coating methods.

EBECRYL® 444 is recommended for use in:

- Wet lithographic inks and coatings for paper, plastics and metals
- Adhesion promoter for inks and coatings on metals, plastics and paper

PERFORMANCE HIGHLIGHTS

EBECRYL® 444 is characterized by:

- Good wet lithographic behaviour
- Fast curing
- Low odour

UV/EB cured formulations based on EBECRYL® 444 are characterized by the following performance properties:

- Good adhesion to metals, plastics and paper

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

TYPICAL VALUE

Viscosity at 60°C, mPa.s	± 1200
Colour, Gardner	max. 5
Acid value, mg KOH/g	max. 25

PHYSICAL PROPERTIES

Density, g/cm ³	1.26
Polymer solids, % by weight	60
OTA 480, % by weight	40

VISCOSITY REDUCTION

EBECRYL® 444 can be diluted with reactive monomers such as trimethylolpropane triacrylate (TMPTA)⁽¹⁾, oligotriacrylate (OTA 480)⁽¹⁾, tripropyleneglycol diacrylate (TPGDA)⁽¹⁾ and 1,6-hexanediol diacrylate (HDDA)⁽¹⁾. The specific reactive diluent(s) used will influence performance properties such as hardness and flexibility.

⁽¹⁾ product of allnex

STORAGE AND HANDLING

Care should be taken not to expose radiation curable products to temperatures exceeding 40°C for prolonged periods or to direct sunlight. This might cause uncontrollable polymerization of the product with generation of heat.

Storage and handling should be in stainless steel, amber glass, amber polyethylene or baked phenolic lined containers. Do not store this material under an oxygen free atmosphere. Use dry air to displace material removed from the container. This material should not be stored for more than 2 years.

PRECAUTIONS

The following is a summary of the precautions to be taken when handling this product. Please refer to the Safety Data Sheet for further details.

The toxicological properties of this material have not been fully determined. Products of this type can be expected to be eye and skin irritant and have the potential to cause sensitization or other allergic responses. Appropriate precautions should be taken to avoid eye and skin contact and to avoid inhalation of the aerosols or vapours. Consult the relevant Safety Data Sheet for appropriate handling procedures and protective equipment prior to using this or any other material referred to in this bulletin.

See Safety Data Sheet for emergency and first aid procedure.

STATUTORY LABELING

For Statutory Labeling information, please refer to Safety Data Sheet.