

EPOXY ACRYLATE OLIGOMER

INTRODUCTION

EBECRYL® 600/50 TM is a bisphenol A epoxy diacrylate diluted with 50% of trimethylolpropane triacrylate (TMPTA) monomer. EBECRYL® 600/50 TM is characterized by its light colour, low odour and fast cure response. Films of EBECRYL® 600/50 TM cured by ultraviolet light (UV) or electron beam (EB) exhibit high gloss, high surface hardness and the good solvent resistance typical of an epoxyresin.

PERFORMANCE HIGHLIGHTS

EBECRYL® 600/50 TM is characterized by:

- Light colour
- Low odour
- Fast cure response

UV/EB cured products based on EBECRYL® 600/50 TM are characterized by the following performance properties:

- High gloss
- High surface hardness
- Good solvent resistance

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 photo initiators.

SUGGESTED APPLICATIONS

Formulated UV/EB curable products containing EBECRYL® 600/50 TM may be applied by lithographic, screen, gravure, direct or reverse roll, and curtain coating methods.

EBECRYL® 600/50 TM is recommended for use in:

- Overprint varnishes
- Coatings for wood, cardboard, chipboard and paper
- Paper upgrading

TYPICAL VALUES

Höppler viscosity at 25°C, mPa.s	± 3200 - 4000
Colour, Gardner	max. 1
Acid value, mg KOH/g	max. 2

PHYSICAL PROPERTIES

Density, g/cm ³	1.15
Molecular weight, theoretical	500
Functionality, theoretical	2
Polymer solids, % by weight	50
TMPTA, % by weight	50

VISCOSITY REDUCTION

EBECRYL® 600/50 TM can be diluted with reactive monomers such as trimethylolpropane triacrylate (TMPTA)⁽¹⁾, tripropyleneglycol diacrylate (TPGDA)⁽¹⁾, 1,6-hexanediol diacrylate (HDDA)⁽¹⁾ and oligotriacrylate (OTA 480)⁽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 after production date.

PRECAUTION

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 procedures.

STATUTORY LABELING

For Statutory Labeling information, please refer to Safety Data Sheet