EBECRYL® 600/35 OT

Technical Datasheet

EPOXY ACRYLATE OLIGOMER

INTRODUCTION

EBECRYL® 600/35 OT is a diacrylate ester of bisphenol A epoxy resin diluted with 35% of oligotriacrylate (OTA 480). This resin is characterized by its low odour, light colour, low irritancy and fast cure response. Films of EBECRYL® 600/35OT cured by exposure to ultraviolet light (UV) and electron beam (EB) exhibit high surface hardness and gloss, low residual odour and the excellent solvent resistance typical of epoxy resins.

PERFORMANCE HIGHLIGHTS

EBECRYL® 600/35 OT is characterized by:

- Fast cure response
- Low irritancy
- Light colour

UV/EB cured products based on EBECRYL® 600/35 OT are characterized by the following performance properties:

- High surface hardness
- High gloss
- Excellent solvent resistance
- Low residual odour

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® 600/35 OT may be applied by lithographic, screen, gravure, direct or reverse roll, and curtain coating methods.
EBECRYL® 600/35 OT is recommended for use in:

- Overprint varnishes
- Screen inks and varnishes
- Coatings on wood, cardboard, chipboard and rigid plastics
- Paper upgrading
- Coatings where low residual odour is required

TYPICAL VALUES

Höppler viscosity at 25°C, mPa.s	± 11500
Colour, Gardner	max. 2
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	65
OTA 480, % by weight	35

VISCOSITY REDUCTION

EBECRYL® 600/35 OT can be diluted with reactive monomers such as oligotriacrylate (OTA 480)[(1)], 1,6-hexanediol diacrylate (HDDA)[(1)], trimethylolpropane triacrylate (TMPTA)[(1)], tripropylene glycol diacrylate (TPGDA)[(1)] and octyl/decyl acrylate (ODA)[(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.