

EBECRYL® 1606

EPOXYACRYLATE OLIGOMER

May 2018



INTRODUCTION

Ebecryl®1606 is a bisphenol A epoxy diacrylate diluted with 20-25% of trimethylolpropane triacrylate (TMPTA)⁽¹⁾ monomer. Ebecryl®1606 is characterized by its light colour, low odour and fast cure response. Films of Ebecryl®1606 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®1606 is characterized by :

- ✓ Light colour
- ✓ Low odour
- ✓ Fast cure response

UV/EB cured products based on Ebecryl®1606 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 photoinitiators.

SUGGESTED APPLICATIONS

Formulated UV/EB curable products containing Ebecryl®1606 may be applied by lithographic, screen, gravure, direct or reverse roll, and curtain coating methods

Ebecryl®1606 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	±30000
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	75-80
TMPTA, % by weight	20-25

VISCOSITY REDUCTION

EBECRYL®1606 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) TMPTA, TPGDA, HDDA and OTA 480 are produced by 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.

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 LABELLING

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

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