

ORGANO-TIN FREE UNDILUTED POLYESTERACRYLATE OLIGOMER

INTRODUCTION

EBECRYL® 1885 is an undiluted polyesteracrylate resin. Films of EBECRYL® 1885 cured by ultraviolet light (UV) or electron beam (EB) exhibits high flexibility and excellent abrasion resistance. EBECRYL® 1885 is recommended for parquet floor and furniture applications.

PERFORMANCE HIGHLIGHTS

EBECRYL® 1885 is characterized by a medium viscosity. UV/EB cured products based on EBECRYL® 1885 are characterized by the following performance properties:

- Excellent abrasion resistance
- High flexibility
- Good reactivity

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

SUGGESTED APPLICATIONS

Formulated UV/EB curable products containing EBECRYL® 1885 may be applied by direct or reverse roll coating methods.

EBECRYL® 1885 is recommended for use in:

- parquet floor applications
- furniture coatings
- plastic coatings
- resilient flooring

TYPICAL VALUES

Dynamic viscosity at 25°C, mPa.s	± 34000
Colour, Gardner	max. 5
Acid value, mg KOH/g	max. 25

PHYSICAL PROPERTIES

Density, g/cm ³	1.19
Polymer solids, % by weight	100
Functionality, theoretical	3
Molecular weight, theoretical	1350

TYPICAL CURED PROPERTIES

Tensile strength, MPa	3.5
Tensile elongation, %	22
Young Modulus, MPa	18.3
Glass transition temperature, °C	21

VISCOSITY REDUCTION

EBECRYL® 1885 can be diluted with reactive monomers such as trimethylolpropane triacrylate (TMPTA)⁽¹⁾, oligotriacrylate (OTA 480)⁽¹⁾, tripropyleneglycol diacrylate (TPGDA)⁽¹⁾, 1,6-hexanediol diacrylate (HDDA)⁽¹⁾ and octyl/decyl acrylate (ODA)⁽¹⁾. The specific reactive diluent(s) used will influence performance properties such as hardness and flexibility.

⁽¹⁾ TMPTA, OTA 480, TPGDA, HDDA and ODA 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.

STATUTORY LABELING

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