

ACRYLIC ACRYLATE

INTRODUCTION

EBECRYL® 1200 is an acrylate functional acrylic resin supplied in 45% by weight of butyl acetate. Upon evaporation of the solvent, films of EBECRYL® 1200 are physically dry and tack-free and after UV/EB curing are hard and chemical resistant without embrittlement. The viscosity and cured properties can be adjusted with the addition of reactive diluents such as 1,6-hexanediol diacrylate (HDDA)⁽¹⁾, isobornyl acrylate (IBOA)⁽¹⁾, trimethylolpropane triacrylate (TMPTA)⁽¹⁾ and tripropylene glycol diacrylate (TPGDA)⁽¹⁾. A suitable photo initiator must be added for polymerization with UV energy.

⁽¹⁾ product of allnex

PERFORMANCE HIGHLIGHTS

EBECRYL® 1200 is characterized by:

- Moderate viscosity
 - Light color
 - Physically dry after solvent evaporation
- UV/EB cured products containing EBECRYL® 1200 are characterized by the following performance properties:
- Excellent chemical and stain resistance
 - Good adhesion, especially for wood
 - Non-yellowing

SPECIFICATIONS

Acid Value, mg KOH/g	max. 10
Appearance	Clear liquid
Color, Gardner	max. 2
Epoxy content, %	max. 0.64
Non-volatile matter, %	53 - 57
Viscosity, 23°C, mPa.s	1500 - 4500

TYPICAL PHYSICAL PROPERTIES

Density, g/cm ³ at 20°C	1.07
Flash Point (Pensky-Martens), °C	22
Hydroxyl value (solids), mg KOH/g	≤ 200
Viscosity, 25°C, mPa.s	~1700

Typical property. Not measured.

TYPICAL CURED PROPERTIES

Tensile strength, psi (MPa)	1421 (9.8)
Elongation at break, %	0.4
Young's Modulus, psi (MPa)	341910 (2358)
Glass transition temperature, °C ⁽²⁾	115
Persoz hardness, s	243

EB cured, 50 kGy (5 Mrad), 250 keV, 75 µm free film

⁽²⁾ Determined by Dynamic Mechanical Analysis; max. tan delta

PRECAUTION

Before using EBECRYL® 1200, see the Safety Data Sheet (SDS) for information on the identified hazards of the material and the recommended personal protective equipment and procedures.

STORAGE AND HANDLING

Care should be taken not to expose the product to high temperature conditions, direct sunlight, ignition sources, oxidizing agents, alkalis or acids. This might cause uncontrollable polymerization of the product with the generation of heat. Storage and handling should be in stainless steel, amber glass, amber polyethylene or baked phenolic lined containers. Procedures that remove or displace oxygen from the material should be avoided. Do not store this material under an oxygen free atmosphere. Dry air is recommended to displace material removed from the container. Wash thoroughly after handling. Keep container tightly closed. Use with adequate ventilation.

EBECRYL® 1200 contains a flammable or combustible liquid and vapor. Consult the SDS for additional storage and handling recommendations. See the SDS for the recommended storage temperature range for EBECRYL® 1200.