

EBECRYL[®] 885 Polyester Triacrylate

INTRODUCTION

EBECRYL 885 is a trifunctional polyester acrylate oligomer. Films of *EBECRYL* 885 cured by ultraviolet light (UV) or electron beam (EB) exhibits high flexibility and excellent abrasion resistance. *EBECRYL* 885 is recommended for parquet floor coating and wood furniture coating applications.

PERFORMANCE HIGHLIGHTS

EBECRYL 885 is characterized by:

- Moderate viscosity
- Good reactivity

UV/EB curable formulated products containing *EBECRYL* 885 are characterized by:

- Excellent abrasion resistance
- High flexibility

The actual properties of UV/EB cured products also depend on the selection of the other formulation components such as oligomers, additives and photoinitiators.

SUGGESTED APPLICATIONS

EBECRYL 885 is recommended as for in:

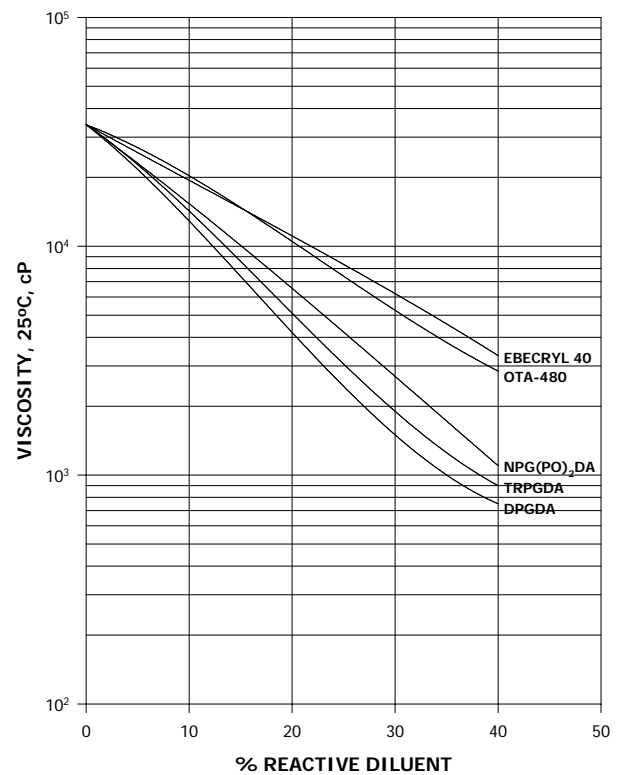
- Parquet flooring
- Furniture coatings
- Plastic coatings
- Resilient flooring

TYPICAL PROPERTIES

Acid value, mg KOH/g	<25
Color, Gardner scale	<5
Density, g/ml at 25°C	1.19
Flash point, Setaflash, °C	>100
Functionality, theoretical	3
Oligomer, % by weight	100
Viscosity at 25°C, cP	~34000

Graph I
***EBECRYL* 885**

Viscosity Reduction with Reactive Diluents





VISCOSITY REDUCTION

Graph I shows the viscosity reduction of *EBECRYL* 885 with 1,6-dipropylene glycol diacrylate (DPGDA)⁽¹⁾, neopentyl glycol propoxylate diacrylate (NPG(PO)₂DA)⁽¹⁾, tripropylene glycol diacrylate (TRPGDA)⁽¹⁾ propoxylated glycerol triacrylate (OTA-480)⁽¹⁾ and *EBECRYL* 40⁽¹⁾. Although viscosity reduction can be achieved with non-reactive solvents, reactive diluents are preferred because they are essentially 100 percent converted during UV/EB exposure to form a part of the coating, thus reducing solvent emissions. The specific reactive diluents used will influence performance properties such as hardness and flexibility.

STORAGE AND HANDLING

Before using *EBECRYL* 885, consult the **Material Safety Data Sheet** for additional information on safety and handling procedures, and recommended personal protective equipment.

The maximum recommended storage temperature for *EBECRYL* 885 is 38°C (100°F). High temperature and fire conditions can cause uncontrolled polymerization with rapid evolution of heat and pressure rise, which may result in violent rupture of the storage tanks or containers. Never store in direct sunlight or adjacent to heated compartments. Containers should be kept closed and away from oxidizing agents, acids, alkalies, peroxides, free radical initiators, photosensitizers, rust, and x-ray or ultraviolet radiation. Procedures that displace oxygen from the material, such as sparging with nitrogen, should be avoided.

PRECAUTIONS

Avoid contact with skin and eyes and breathing vapors. Contains materials that may cause injury to the eyes and skin. Sensitization may occur. Skin irritation may not occur immediately and contact may go unnoticed for up to 48 hours. Solvents should not be used to clean skin because of increased penetration potential. Contaminated clothing, shoes, belts and other leather goods should be removed immediately. Incinerate contaminated leather goods, including shoes. Wash contaminated clothing thoroughly before reuse.

Please refer to the Cytec **Guide to Safety and Handling** for additional information on the safe handling of acrylates.

(1) Product of Cytec Industries Inc.