

HIGH FUNCTIONALITY POLYESTER ACRYLATE OLIGOMER

INTRODUCTION

EBECRYL® 833 is a high functionality polyester acrylate oligomer with good reactivity when exposed to sources of free radicals. It is compatible with a wide range of acrylated resins. EBECRYL® 833 is suitable as a BPA-free alternative to EBECRYL® 150 in UV (ultraviolet) and EB (electron beam) curable inks and coatings where improved cure response, hardness and scratch/abrasion resistance are required.

PERFORMANCE HIGHLIGHTS

EBECRYL® 833 is characterized by:

- Light color
- Moderate viscosity

UV/EB cured products based on EBECRYL® 833 are characterized by the following performance properties:

- Fast cure response
- High cross-link density
- Good abrasion resistance
- 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 photo initiators.

SUGGESTED APPLICATIONS

Formulated UV/EB curable products containing EBECRYL® 833 may be applied by lithographic, screen, gravure, direct or reverse roll, and curtain coating methods.

EBECRYL® 833 is recommended for use in UV/EB curable inks and coatings where fast cure response and high cross-link density are desired

TYPICAL PHYSICAL PROPERTIES

Appearance	Clear liquid
Acid value, mg KOH/g	max. 10
Color, Gardner	max. 2
Functionality, theoretical	5
Resin solids, %	100
Viscosity, 25°C, mPa.s	1300

PRECAUTIONS

Before using EBECRYL® 833, 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.

A precipitate may form in this material at temperatures below 20°C. If a precipitate does form it can be dissolved by warming the material to 25°C.

See the SDS for the recommended storage temperature range for EBECRYL® 833.