

POLYESTER ACRYLATE OLIGOMER

INTRODUCTION

EBECRYL® 837 is a 100% solids multifunctional polyester acrylate oligomer. EBECRYL® 837 is particularly useful 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® 837 is characterized by:

- High acrylate functionality
- Low viscosity

UV/EB cured products based on EBECRYL® 837 are characterized by the following performance properties:

- Fast cure response
- High cross-link density
- Improved scratch and abrasion resistance
- Excellent hardness
- Excellent chemical 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® 837 may be applied by lithographic, screen, gravure, direct or reverse roll, and curtain coating methods.

EBECRYL® 837 is recommended for use in:

- UV/EB curable inks and coatings where fast cure response and high cross-link density are desired

TYPICAL VALUES

Dynamic viscosity at 25°C, mPa.s	± 800
Colour, Gardner	3

PHYSICAL PROPERTIES

Density, g/cm ³	1.14
Molecular weight, theoretical	2700
Functionality, theoretical	6
Polymer solids, % by weight	100

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 LABELING

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