

MODIFIED POLYESTER ACRYLATE

INTRODUCTION

EBECRYL® 846 is a modified polyester tetraacrylate with improved reactivity. EBECRYL® 846 provides the proper water balance necessary for good lithography and good cure response in UV, HUV, UV LED, and EB cured offset lithographic inks. Lithographic inks based on EBECRYL® 846 will also exhibit good ink transfer, dot definition and tack. EBECRYL® 846 contains some materials that are derived from Bisphenol A.

PERFORMANCE HIGHLIGHTS

- Excellent reactivity
- Good water balance
- Good printability

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

SUGGESTED APPLICATIONS

EBECRYL® 846 is recommended for commercial applications using high speed sheetfed offset on paper and board substrates. It can also be used in other wet or dry offset inks.

TYPICAL TACK RANGES

| Oligomer/Reactive diluent | Tack, g-m |
|-----------------------------------------|-----------|
| EBECRYL® 846 | 12-14 |
| EBECRYL® 846/5% OTA-480 ⁽¹⁾ | 9-10 |
| EBECRYL® 846/10% OTA-480 ⁽¹⁾ | 7-9 |
| EBECRYL® 846/5% TPGD ⁽¹⁾ | 7-9 |
| EBECRYL® 846/10% TPGDA ⁽¹⁾ | 5-7 |

400 RPM, 90°F, 3 minutes; Thwing-Albert Electronic Inkometer
⁽¹⁾ product of allnex

SPECIFICATIONS

| | |
|--------------------------|---------------|
| Acid value, mg KOH/g | max. 10 |
| Appearance | Clear liquid |
| Epoxy content, % | max. 0.5 |
| Viscosity at 25°C, mPa.s | 35000 - 55000 |

TYPICAL PROPERTIES

| | |
|----------------------------|------|
| Density, g/cm³ at 25°C | 1.14 |
| Functionality, theoretical | 4 |

PRECAUTIONS

Before using EBECRYL® 846, 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.

See the SDS for the recommended storage temperature range for EBECRYL® 846.