

POLYESTER ACRYLATE OLIGOMER
PRODUCED FOLLOWING GOOD MANUFACTURING PRACTICES (GMP)

INTRODUCTION

EBECRYL® LEO 10801 is a hexafunctional polyester acrylate oligomer that provides high reactivity and the proper ink-water balance necessary for good lithographic printing. Lithographic inks based on EBECRYL® LEO 10801 display excellent rheological properties ensuring good ink transfer from the printing plate to the blanket and then to the substrate, combined with good dot definition.

EBECRYL® LEO 10801 has been specifically developed to formulate UV/EB curable inks with low extractables and low odor for indirect food contact applications.

PERFORMANCE HIGHLIGHTS

EBECRYL® LEO 10801 is characterized by:

- Very good lithographic behavior
- Good pigment wetting

UV/EB cured products based on EBECRYL® LEO 10801 are characterized by the following performance properties:

- Fast curing
- Good solvent resistance
- High gloss
- Low extractables
- Low odor

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® LEO 10801 is recommended for use in:

- Lithographic and flexographic inks
- Offset OPV
- Inks and coatings for indirect food packaging and related applications

SPECIFICATIONS

Acid value, mg KOH/g	max. 15
Appearance	Clear dark liquid
Residual acrylic acid, ppm	max. 500
Residual solvent, ppm	max. 10
Viscosity, 25°C, cP/mPa.s	45600 - 52400

TYPICAL PROPERTIES

Density, g/cm ³	1.08
Functionality, theoretical	6
Molecular weight, theoretical	1500

MUTAGENICITY ASSESSMENT

The following mutagenicity studies have been conducted in compliance with Good Laboratory Practice standards and according to the specific OECD Guidelines for Testing of Chemicals as follows:

- Ames test – OECD 471
- Mouse micronucleus test – OECD 474

In conclusion, based on the weight of the evidence of available mutagenicity test results, EBECRYL® LEO 10801 is considered a nongenotoxic product (more information available on request).

VISCOSITY REDUCTION

EBECRYL® LEO 10801 can be diluted with the low extractable/low odor diluting acrylates EBECRYL® LEO 10501⁽¹⁾ and EBECRYL® LEO 10502⁽¹⁾. The specific reactive diluents used will influence performance properties such as hardness and flexibility.

⁽¹⁾ Product of allnex

PRECAUTIONS

Before using EBECRYL® LEO 10801, 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® LEO 10801.