TECHNICAL DATASHEET

EBECRYL® UV/EB Energy Curable Resins

EBECRYL® LEO 10553

Polymeric Amine Modified Polyether Acrylate
Produced following Good Manufacturing Practices (GMP)

March 2018

INTRODUCTION

EBECRYL LEO 10553 is a low viscosity polymeric amine modified polyether acrylate that provides low extractables, low odor and low migration and after UV or EB curing.

EBECRYL LEO 10553 is recommended for use in low odor and low migrating UV overprint varnishes (OPV's) and inks for indirect food packaging applications.

PERFORMANCE HIGHLIGHTS

EBECRYL LEO 10553 is characterized by:

- Low viscosity
- Low odor

UV/EB cured products based on EBECRYL LEO 10553 are characterized by the following performance properties:

- Good cure response
- Good flexibility
- Good solvent resistance
- High gloss
- Low extractables
- Low odor
- Low migration

The properties of UV/EB cured products also depend on the choice of the other formulation components, such as reactive diluent(s), additives and photoinitiators.

SUGGESTED APPLICATIONS

EBECRYL LEO 10553 is recommended as the main oligomer for low extractable and low odor overprint varnishes and flexographic inks.

MUTAGENICITY ASSESSMENT

This product and its major component have been evaluated for mutagenicity. All studies were conducted in compliance with Good Laboratory Practice standards and according to the specific OECD Guidelines for Testing of Chemicals. EBECRYL LEO 10553 was not mutagenic in the Ames test (OECD 471). In addition, the major component of this product was not mutagenic in the following studies:

- Ames test – OECD 471
- Micronucleus test in the mouse – OECD 474

In conclusion, on the basis of the weight of the evidence of mutagenicity test results, EBECRYL LEO®10553 is considered nongenotoxic.

SPECIFICATIONS	VALUE
Appearance	Clear liquid
Color, Gardner scale, max.	2
Viscosity, 25°C, cP/mPa·s	130-200

TYPICAL PROPERTIES	VALUE
Density, g/ml at 25°C	1.12
Functionality, theoretical	3.4
Molecular weight, g/mol	780
Residual acrylic acid, ppm	<200
Residual amine, ppm	200
Residual solvent, ppm	10
Weight/amine, theoretical	2004

PRECAUTIONS

Before using EBECRYL LEO 10553, 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 10553.

Please refer to the allnex Guide to Safety and Handling of Acrylate Oligomers and Monomers for additional information on the safe handling of acrylates.

www.allnex.com