

ALIPHATIC URETHANE METHACRYLATE RESIN

INTRODUCTION

EBECRYL® 249 is an aliphatic urethane methacrylate. Films of EBECRYL® 249 cured by electron beam (EB) or ultraviolet light (UV) exhibit good exterior durability, good adhesion and a high order of scuff and abrasion.

PERFORMANCE DATA

EBECRYL® 249 is characterized by:

- Light colour
- High viscosity

UV/EB cured products based on EBECRYL® 249 are characterized by the following performance properties:

- Excellent non-yellowing
- High scuff and abrasion resistance
- Good exterior durability

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 Formulated UV/EB curable products containing EBECRYL® 249 may be applied by lithographic, screen, gravure, direct or reverse roll, and curtain coating methods.

EBECRYL® 249 is recommended for use in:

- Clear coatings for paper
- Clear coatings on flexible and semi-rigid plastics
- Silk screen inks
- Solder resists as a flexibilizer
- Wood top coats

VISCOSITY REDUCTION

EBECRYL® 249 can be diluted with reactive monomers such as 1,6hexanediol diacrylate (HDDA)⁽¹⁾, tripropyleneglycol diacrylate (TPGDA)⁽¹⁾ trimethylolpropane triacrylate (TMPTA)⁽¹⁾, oligotriacrylate (OTA 480)⁽¹⁾ and EBECRYL® PEG200DMA⁽¹⁾. The specific reactive diluent(s) used will influence performance properties such as hardness and flexibility.

(1) product of allnex

TYPICAL PHYSICAL PROPERTIES

Colour, Gardner	≤1
Density, g/ml	1.08
Functionality, theoretical	2
Reactive material, % by weight	100
Viscosity at 60°C, mPa·s	2150

TYPICAL CURED PROPERTIES

Tensile strength, MPa (psi)	12.8 (1856)
Elongation at break, %	1.2
Young's modulus ⁽¹⁾ , MPa (psi)	1140 (165343)
Glass transition temperature, °C	78

PRECAUTION

Before using EBECRYL[®] 249, 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® 249.

STATUTORY LABELING

Please refer to Safety Data Sheet.

2.0 / 26.08.2021 (replaces all previous versions)

Worldwide Contact Info: www.allnex.com

Page 1/1

Disclaimer: allnex Group companies ('allnex') exclude all liability with respect to the use made by anyone of the information contained herein. The information contained herein repreents allnex's best knowledge but does not constitute any express or implied guarantee or warranty as to the accuracy, the completeness or relevance of the data set out herein. Nothing contained herein shall be construed as conferring any license or right under any patent or other intellectual property rights of allnex or of any third party. The information relating to the products is given for information purposes only. No guarantee or warranty is provided that the product and/or information is suitable for any specific use, performance or result. Any unauthorized use of the product or information may infringe the intellectual property rights of allnex, including its patent rights. The user should perform his/her own tests to determine the suitability for a particular purpose. The final choice of use of a product and/or information as well as the investigation of any possible violation of intellectual property rights or misappropriation of trade secrets of allnex and/or third parties remain the sole responsibility of the user Notice: Trademarks indicated with *, TM or * as well as the allnex name and logo are registered, unregistered or pending trademarks of Allnex Netherlands B.V. or its directly affiliated allnex Group companies. ©2021 allnex Group. All Rights Reserved