

# EBECRYL® 4265

## Aliphatic Urethane Acrylate

### INTRODUCTION

EBECRYL 4265 is an aliphatic urethane acrylate without reactive diluent. It is characterized by its low viscosity and yields coatings with good chemical and mechanical properties.

### SUGGESTED APPLICATIONS

EBECRYL 4265 is designed for use in the formulation of UV/EB energy curable coatings for application by roller coating, spraying and curtain coating on wood, cork, furniture, paper, parquet, plastics and film.

### FORMULATING

Coatings can be adjusted to appropriate viscosity for the application with additional TPGDA or the addition of other standard reactive diluents such as 1,6-hexanediol diacrylate (HDDA)<sup>(1)</sup>, isobornyl acrylate (IBOA)<sup>(1)</sup>, and trimethylolpropane triacrylate (TMPTA)<sup>(1)</sup> or solvents such as butyl acetate.

EBECRYL 4265 is compatible with most acrylate monomers and oligomers. Because of the many potential combinations with reactive diluents and solvents, compatibility must be tested in each individual case.

UV curing of coatings formulated with EBECRYL 4265 requires the addition of standard commercial photoinitiators. Typical levels are 4-6%, though this may vary to meet the reactivity requirements of the application. In the case of EB curing, a low oxygen atmosphere must be ensured to avoid surface inhibition.

### SPECIFICATIONS

	VALUE
Colour, Pt-Co scale <sup>(2)</sup> , max.	200
Viscosity, 23°C, cP/mPa·s	500-1100

### TYPICAL PHYSICAL PROPERTIES

Acid value, mg KOH/g	1
Density, g/ml at 20°C	1.12
Flash point, °C	>100
Functionality	3.4
Hydroxyl content, %	0.3

### TYPICAL CURED PROPERTIES

Tensile strength, psi (MPa)	5800 (21)
Elongation at break, %	13

### STORAGE AND HANDLING

Before using EBECRYL 4265, consult the Safety Data Sheet for additional information on safety and handling procedures, and recommended personal protective equipment.

The recommended storage temperature range for EBECRYL 4265 is 4°C to 40°C (39°F to 104°F). Care should be taken not to expose the product to high temperature conditions, direct sunlight, ignition sources, oxidizing agents, alkalis or acids. Prevent inadvertent contact with peroxides and other radical initiators and contact with copper, copper alloys, carbon steel, iron and rust. 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.

### PRECAUTIONS

Avoid contact with eyes and skin. Direct contact with this material may cause moderate eye and slight skin irritation. Wash thoroughly after handling. Keep container tightly closed. Use with adequate ventilation.

(1) Product of Allnex

(2) Also referred to as APHA/Hazen colour

• Worldwide Contact Info: [www.allnex.com](http://www.allnex.com) •

Disclaimer: Allnex Group companies ("Allnex") decline any liability with respect to the use made by anyone of the information contained herein. The information contained herein represents Allnex's best knowledge thereon without constituting any express or implied guarantee or warranty of any kind (including, but not limited to, regarding 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 adapted for any specific use, performance or result and that product and/or information do not infringe any Allnex and/or third party intellectual property rights. The user should perform its 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 of Allnex and/or third parties remains the sole responsibility of the user.

TRADEMARK NOTICE: Trademarks indicated with the ®, ™ or \* are registered, unregistered or pending trademarks of Allnex Belgium SA or its directly or indirectly affiliated Allnex Group companies.