

TECHNICAL DATA SHEET

Energy Curable Resins

EBECRYL® 888

Polyester Acrylate

INTRODUCTION

EBECRYL 888 is a low viscosity polyester acrylate designed for use in energy-cure primer coatings to provide ink receptivity and prevent plasticizer migration. Films containing EBECRYL 888 which are cured by ultraviolet light (UV) or electron beam (EB) exhibit good adhesion, good abrasion resistance and high flexibility. EBECRYL 888 is recommended for use in flexographic or gravure primer coatings printed on polyester, plasticized PVC and uncoated films.

PERFORMANCE HIGHLIGHTS

EBECRYL 888 is characterized by:

- Low viscosity
- Low color
- Good reactivity

 $\ensuremath{\mathsf{UV/EB}}$ curable formulated products containing EBECRYL 888 are characterized by:

- Good adhesion
- Good abrasion resistance
- · High flexibility
- Excellent ink receptivity

The actual properties of UV/EB cured products also depend on the selection of the other formulation components such as oligomers, additives and photoinitiators.

SUGGESTED APPLICATIONS

EBECRYL 888 is recommended for use in gravure and flexographic coatings, such as:

- · Primer coatings for ink receptivity
- Coatings to reduce plasticizer migration from substrates
- Topcoats for block and scuff resistance

TYPICAL PROPERTIES	VALUE	
Appearance	Clear to slightly hazy liquid	
Color, Gardner scale	<2	
Density, g/ml at 25°C	1.19	
Flash point, Setaflash, °C	>100	
Functionality, theoretical	3.5	
Oligomer, % by weight	100	
Viscosity, 25°C, cP/mPa·s	3500	

STARTING POINT FORMULATIONS

GRAVURE PRIMER COATING	%
EBECRYL 888	40.0
HDDA ⁽¹⁾	20.0
TMPEOTA ⁽¹⁾	32.3
Agitan® 731 ⁽²⁾	0.2
Speedcure 84 ⁽³⁾	7.5
Viscosity, 25°C, cP/mPa·s	110

FLEXOGRAPHIC PRIMER COATINGS	with HDDA	without HDDA
		%
EBECRYL 888	60.0	60.0
HDDA	10.0	_
TMPEOTA	12.3	17.3
TPGDA ⁽¹⁾	10.0	15.0
Agitan 731	0.2	0.2
Speedcure 84	7.5	7.5
Viscosity, 25°C, cP/mPa·s	240	325

Reactive diluents HDDA (1,6-hexanediol diacrylate), TMPEOTA (trimethylolpropane ethoxy triacrylate), and TPGDA (tripropylene glycol diacrylate) are products of Allnex.

⁽²⁾ Defoamer; product of Münzing Chemie GmbH

⁽³⁾ Photoinitiator; product of Lambson.

www.allnex.com

STORAGE AND HANDLING

Before using EBECRYL 888, consult the **Safety Data Sheet** for additional information on hazards, handling procedures, and recommended protective equipment.

The recommended storage temperature range for EBECRYL 888 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. 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 severe eye and moderate skin irritation. Contact with skin may cause a cross-allergic reaction in persons already sensitized to acrylate materials. Wash thoroughly after handling. Keep container tightly closed. Use with adequate ventilation.

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

• Worldwide Contact Info: 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 uicense 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 $^{\circ}$, $^{\circ}$ or $^{\circ}$ are registered, unregistered or pending trademarks of Allnex Belgium SA or its directly or indirectly affiliated Allnex Group companies.