

Innovative Energy Curable Resins for Plastics

Cytec offers innovative products designed to meet today's demanding needs in customer electronics and industrial plastics markets. The following tables will provide general guidance on technical parameters for some of CYTEC's newest innovative grades.

Adhesion Promoter		
	Description	Key Features & Benefits
EBECRYL® 113	Aliphatic Acrylate Monoacrylate	<ul style="list-style-type: none"> • Excellent flexibility and adhesion to a variety of substrates
EBECRYL® 130	Cyclic Aliphatic Diacrylate	<ul style="list-style-type: none"> • Good adhesion to plastic; accept metallization • Low volumetric shrinkage • Increase water barrier properties
EBECRYL® 1039	Aliphatic Urethane Monoacrylate	<ul style="list-style-type: none"> • Excellent flexibility and adhesion to variety of substrates
EBECRYL® 168	Acidic Methacrylate	<ul style="list-style-type: none"> • Excellent adhesion promoter to plastic and metal/metalized surfaces • Good compatibility with acrylate chemistries

Innovative Surface Effect Products		
	Description	Key Features & Benefits
EBECRYL® 154/8311	Acrylate Functional Nanocomposite	<ul style="list-style-type: none"> • Superior surface hardness • Low viscosity • Low haze development • PETA free
EBECRYL® 8296	Aliphatic Urethane Triacrylate	<ul style="list-style-type: none"> • Provides "wet" feel after cure • Influences tactile response (additives such as waxes, rubbers, and silicas required to get specific tactile response)
EBECRYL® 8100	Aliphatic Hexaacrylate Oligomer	<ul style="list-style-type: none"> • Easy removal of fingerprint, dirt, and particulates from cured surface with long lasting effect • Outstanding permanent marker resistance • Contact angle (water 115°), surface energy <20 dynes

Innovative Durable Products

	Description	Key Features & Benefits
EBECRYL® 8405	Aliphatic Urethane Tetraacrylate	<ul style="list-style-type: none"> • Outstanding outdoor durability • <i>Can be thermally formed after cure</i> • Good water barrier properties
EBECRYL® 8701	Aliphatic Urethane Triacrylate	<ul style="list-style-type: none"> • Excellent exterior durability • <i>Excellent surface hardness</i> • Good stain resistance
EBECRYL® 8702	Aliphatic Urethane Hexaacrylate	<ul style="list-style-type: none"> • <i>Water dilutable (20%)</i> • Good pigment wetting properties • Improves impact resistance
EBECRYL® 4858	Aliphatic Urethane Difunctional	<ul style="list-style-type: none"> • <i>Very low viscosity (monomer free)</i> • Excellent outdoor durability • Outstanding hardness and abrasion resistance for difunctional urethane acrylate

Guide for Product Selection

Performance Properties (Relative Ranking):

*****= Outstanding, **** = Excellent, ***= Good, **= Fair

	Adhesion	Flexibility	Metallization	Reactivity	Steel Wool Scratch	Haze After Abrasion	Stain Resistance
Reactive Diluent							
EBECRYL® 113	****	****	*	*	n/a	n/a	*
EBECRYL® 1039	****	****	*	**	n/a	n/a	*
EBECRYL® 130	***	****	*****	***	**	**	***
Innovative Resin							
EBECRYL® 154	***	*	***	*****	*****	*****	****
EBECRYL® 8100	***	*	*	****	****	***	****
EBECRYL® 8311	***	*	***	*****	****	****	****
EBECRYL® 8405	****	***	*****	****	**	***	***
EBECRYL® 8701	***	**	***	***	***	***	****
EBECRYL® 8702	***	***	**	***	**	***	***
EBECRYL® 4858	***	****	**	**	***	***	****
Specialty Resin							
EBECRYL® 168	****	****	**	*	n/a	n/a	*

Starting Point Formulations

	Primer	Primer Metallization	Topcoat Metallization	Low Haze After Abrasion	Easy To Clean	Outdoor Durability	Abrasion Resistance	HAPTIC
Reactive Diluent								
Percent Product								
EBECRYL® 113	48							30
EBECRYL® 1039								
EBECRYL® 130	48	28						
HDODA ¹		10		10	10	10	10	
TMPTA ¹		15	29	30	6	20	19	
Performance Resin								
EBECRYL® 154				56				
EBECRYL® 8311			30					
EBECRYL® 8100					70			
EBECRYL® 8296								46
EBECRYL® 8405		28				46		
EBECRYL® 8701			15			10	10	
EBECRYL® 8702							55	
EBECRYL® 4858		15	20		10	10		20
Specialty Resin								
EBECRYL® 168			2					
Photoinitiator								
ADDITOL® CPK ²	4	4	4	4	4	4	4	4

1. CYTEC Industries produce HDODA (1,6-Hexanediol Diacrylate) and TMPTA (Trimethylol Propane Triacrylate)

2. ADDITOL CPK chemical name is 1-Hydroxy-cyclohexylphenyl-ketone

• Email: custinfo@cytec.com Worldwide Contact Info: www.cytec.com US Toll Free: 800-652-6013 Tel: (+1) 973-357-3193 •

Disclaimer: Cytec Industries Inc. in its own name and on behalf of its affiliated companies (collectively, "Cytec") decline any liability with respect to the use made by anyone of the information contained herein. The information contained herein represents Cytec'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 Cytec 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 Cytec 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 Cytec and/or third parties remains the sole responsibility of the user.

TRADEMARK NOTICE: The ® indicates a Registered Trademark in the United States and the ™ or * indicates a Trademark in the United States. The mark may also be registered, the subject of an application for registration or a trademark in other countries.