

EBECRYL® 889

Polyester Tetraacrylate

INTRODUCTION

EBECRYL 889 is an energy curable polyester acrylate for publication inks. EBECRYL 889 provides good pigment wetting and color development for process color inks. Inks made with EBECRYL 889 exhibit good adhesion to super-calendared paper, good ink transfer and excellent printability.

PERFORMANCE HIGHLIGHTS

- Inks with lower tack and lower misting
- Inks with higher gloss
- Adhesion to super-calendared paper
- Excellent printability

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

SUGGESTED APPLICATIONS

EBECRYL 889 is recommended for wet or dry offset inks, formulated for porous substrates.

TYPICAL TACK RANGES⁽¹⁾

Oligomer / Reactive diluent	Tack, g-m
EBECRYL 889	10-12
EBECRYL 889/5% OTA-480 ⁽²⁾	8-10
EBECRYL 889/5% TMPTA ⁽²⁾	8-10
EBECRYL 889/5% TRPGDA ⁽²⁾	9-11

TYPICAL PROPERTIES⁽³⁾

	VALUE
Appearance	Clear liquid
Color, Gardner scale	≤10
Density, g/ml at 25°C	1.07
Functionality, theoretical ⁽⁴⁾	4
Viscosity, 25°C, cP	30000

EBECRYL 889 PRINTING PROPERTIES⁽⁵⁾

Pigment	Target:	Achieved:
Color	Color Density	Color Density
Magenta	1.35	1.45
Black	1.50	1.63
	Target:	Achieved:
	Print Contrast	Print Contrast
Magenta	> 21%	35%
Black	> 23%	36%

Press side Comments:

- ✓ Quick and easy make-ready
- ✓ Consistent printing – stable color density and print contrast
- ✓ Easy press clean-up

STARTING POINT FORMULAS

Pigment Dispersion	%
EBECRYL 889	55-60
Acrylated monomer	5-10
Pigment	25-35
Ink	%
EBECRYL 889 Pigment dispersion	55-60
EBECRYL 889	20-25
Acrylated monomer	2-4
Inert filler	2-4
ADDITOL® DX ⁽²⁾	8-10

(1) 400 RPM, 90°F, 3 minutes; Thwing-Albert Electronic Inkometer

(2) Allnex produces OTA-480 (propoxylated glycerol triacrylate) TMPTA (trimethylolpropane triacrylate) and TRPGDA (tripropylene glycol diacrylate) and ADDITOL DX (liquid photoinitiator blend).

(3) Standard Methods of Testing available upon request.

(4) Theoretical determination based on the undiluted oligomer

(5) Ryobi 2800 CD Duplicator with integrated dampening system on super-calendared paper

STORAGE AND HANDLING

Before using EBECRYL 889, consult the **Safety Data Sheet** for additional information on hazards, handling procedures, and recommended protective equipment.

The maximum recommended storage temperature for EBECRYL 889 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, skin and clothing. Direct contact with this material may cause moderate eye and skin irritation. Repeated or prolonged dermal contact may cause allergic skin reactions. Wash thoroughly after handling. Use with adequate ventilation. Keep container closed.

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 •

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