

EBECRYL® 3420

MODIFIED EPOXY-ACRYLATE

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INTRODUCTION

Ebecryl®3420 is a low viscosity, modified epoxy acrylate with good pigment wetting ability.

In UV offset, the final ink produced with this resin exhibits an enhanced ink water balance and good misting.

Ebecryl®3420 can be used to produce a UV flexo ink with good flow, high gloss and high reactivity.

PERFORMANCE HIGHLIGHTS

Ebecryl®3420 is characterized by :

- ✓ Xi free
- ✓ low viscosity
- ✓ improved flexibility

UV/EB cured products based on Ebecryl®3420 are characterized by the following performance properties:

In UV offset lithography:

- ✓ good pigment wetting
- ✓ improved ink water balance
- ✓ good viscosity/tack relation
- ✓ reduced misting

In UV flexo:

- ✓ good pigment wetting (especially for carbon black)
- ✓ high gloss
- ✓ high reactivity
- ✓ flexibility

The properties of UV/EB cured products are dependent on the components used in the formulation. Formulations can contain reactive diluent(s), additives and photoinitiators.

SUGGESTED APPLICATIONS

Ebecryl®3420 is especially suited for UV offset lithography and UV flexo inks but can of course be used for other applications such as screen, gravure, OPV.

TYPICAL VALUES

Höppler viscosity at 25 °C, mPa.s	22000
Colour, Gardner	max. 3
Acid value, mg KOH/g	max. 2
Functionality, theoretical	2

VISCOSITY REDUCTION

Ebecryl®3420 can be diluted with reactive monomers such as 1,6 hexanediol diacrylate (HDDA)⁽¹⁾, trimethylolpropane triacrylate (TMPTA)⁽¹⁾, tripropyleneglycol diacrylate (TPGDA)⁽¹⁾, octyl/decyl acrylate (ODA)⁽¹⁾ and oligotriacrylate (OTA 480)⁽¹⁾. The specific reactive diluent(s) used will influence performance properties such as hardness and flexibility.

(1) HDDA, TMPTA, TPGDA, ODA and OTA 480 are produced byAllnex

STORAGE AND HANDLING

Care should be taken not to expose radiation curable products to temperatures exceeding 40°C for prolonged periods or to direct sunlight. This might cause uncontrollable polymerization of the product with generation of heat.

Storage and handling should be in stainless steel, amber glass, amber polyethylene or baked phenolic lined containers. Do not store this material under an oxygen free atmosphere. Use dry air to displace material removed from the container. This material should not be stored for more than 2 years.

PRECAUTIONS

The following is a summary of the precautions to be taken when handling this product. Please refer to the Safety Data Sheet for further details. Although Ebecryl®3420 is not classified as irritant, it is frequently diluted with reactive monomers that are irritant. Therefore, appropriate precautions should be taken to avoid eye and skin contact and to avoid inhalation of the aerosols or vapours. Consult the relevant Safety Data Sheet for appropriate handling procedures and protective equipment prior to using this or any other material referred to in this bulletin.

See Safety Data Sheet for emergency and first aid procedures.

STATUTORY LABELLING

Please refer to Safety Data Sheet.

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