EBECRYL® 416

Technical Datasheet

DILUTED POLYESTER OLIGOMER

INTRODUCTION

EBECRYL® 416 is a chlorinated polyester resin, free from intentionally added Bisphenol A, diluted with trimethylolpropane triacrylate (TMPTA) monomer . Films of EBECRYL® 416 cured by ultraviolet light (UV) or electron beam (EB) display good adhesion to metals, plastics and paper.

SUGGESTED APPLICATIONS

EBECRYL® 416 is recommended for use in:

- Offset inks for plastic and metallic substrates

Formulated UV/EB curable products containing EBECRYL® 416 may be applied by lithography, flexography, screen, gravure, direct or reverse roll.

PERFORMANCE HIGHLIGHTS

EBECRYL® 416 is characterized by:

- High reactivity
- Good adhesion to plastics substrates such as PE, PP, PET, PC, OPS and PVC

The actual properties of UV/EB cured products also depend on the selection of the other formulation components, such as reactive diluent(s), additives and photo initiators.

TYPICAL VALUE

Appearance	clear liquid
Density, g/cm^3	1.28
Viscosity at 60°C, mPa.s	± 1800
Colour, Gardner	< 3
Acid value, mg KOH/g	< 15

VISCOSITY REDUCTION

EBECRYL® 416 can be diluted with reactive monomers such as 1,6-hexanediol diacrylate (HDDA)[(1)], trimethylolpropane triacrylate (TMPTA)[(1)], tripropyleneglycol diacrylate (TPGDA)[(1)], oligotriacrylate (OTA 480)[(1)] and EBECRYL® 40[(1)]. The specific reactive diluent(s) used will influence performance properties such as odour, adhesion, hardness and flexibility.

[(1)] HDDA, TMPTA, TPGDA and OTA 480 are produced by allnex

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 after production date.

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.

The toxicological properties of this material have not been fully determined. Products of this type can be expected to be eye and skin irritant and have the potential to cause sensitization or other allergic responses. 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 LABELING

For Statutory Labeling information, please refer to Safety Data Sheet.