

HYDROCARBON ACRYLATE OLIGOMER

INTRODUCTION

EBECRYL® 305 has been developed for EB and UV cured flexographic inks. EBECRYL® 305 gives excellent adhesion to a wide range of plastic substrates. This material was developed specifically to give good adhesion to polyolefinic substrates in particular, uncoated polypropylene. It can be used as the major component of the pigment concentrate and as a component in the diluent.

PERFORMANCE HIGHLIGHTS

EBECRYL® 305 is characterized by:

- Light colour
- Medium viscosity
- Excellent adhesion to plastics
- Good adhesion to polypropylene
- Chlorine free

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.

SUGGESTED APPLICATIONS

EBECRYL® 305 is recommended for use in:

- Flexographic applications where adhesion to plastic substrates is required.
- Applications where adhesion to polypropylene or polyethylene is required.

Formulated UV/EB curable products containing EBECRYL® 305 may also be applied by lithographic, screen, gravure, direct or reverse roll, and curtain coating methods.

TYPICAL VALUES

| | |
|---|----------------------|
| Appearance | clear viscous liquid |
| Cone and plate viscosity at 25°C, mPa.s | ± 7000 |
| Colour, Gardner | max. 2 |

PHYSICAL PROPERTIES

| | |
|----------------------------|------|
| Density, g/cm ³ | 1.1 |
| Molecular weight, g/mol | 1500 |

VISCOSITY REDUCTION

EBECRYL® 305 can be diluted with reactive monomers such as 1,6-hexanediol diacrylate (HDDA)⁽¹⁾, trimethylolpropane triacrylate (TMPTA)⁽¹⁾, tripropylene glycol diacrylate (TPGDA)⁽¹⁾ and octyl/decyl acrylate (ODA)⁽¹⁾. The specific reactive diluent(s) used will influence performance properties such as hardness and flexibility.

⁽¹⁾ product of 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 1 year.

PRECAUTION

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.