EBECRYL® 6203

Technical Datasheet

URETHANE ACRYLATE OLIGOMER

INTRODUCTION

EBECRYL® 6203 is an aromatic urethane diacrylate oligomer diluted with 30% of dipropylene glycol diacrylate (DPGDA) monomer. Films of EBECRYL® 6203 cured by ultraviolet light (UV) or electron beam (EB) exhibit good flexibility, acceptable abrasion resistance, good adhesion to various substrates in combination with a good solvent resistance.

PERFORMANCE DATA

EBECRYL® 6203 is characterized by:

- Light colour
- Low odour

UV/EB cured products based on EBECRYL® 6203 are characterized by the following performance properties:

- Good adhesion to various substrates
- Good flexibility and toughness
- Good solvent resistance

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

Formulated UV/EB curable products containing EBECRYL® 6203 may be applied by direct or reverse roll.
EBECRYL® 6203 is recommended for use in:

- Coatings on rigid and flexible plastics
- Wood coatings
- Screen inks
- Low gloss coatings
- Conformal coatings

TYPICAL VALUE

Höppler viscosity at 25°C, mPa.s	± 6500
Colour, Gardner	max. 1

PHYSICAL PROPERTIES

Density, g/cm^3	1.1
Molecular weight, theoretical	1500
Functionality, theoretical	2
Polymer solids, % by weight	70
DPGDA, % by weight	30

VISCOSITY REDUCTION

EBECRYL® 6203 can be diluted with reactive monomers such as trimethylolpropane triacrylate (TMPTA)[(1)], tripropylene glycol diacrylate (TPGDA)[(1)], dipropylene glycol diacrylate (DPGDA)[(1)], octyl/decyl acrylate (ODA)[(1)] and acrylated glycol derivative (OTA 480)[(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 2 years.

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

Please refer to Safety Data Sheet