EBECRYL® 109

Technical Datasheet

(METH)ACRYLATE ESTER

INTRODUCTION

EBECRYL® 109 is an acrylate - methacrylate monomer blend, containing 50% of trimethylolpropane triacrylate (TMPTA) and 50% hydroxyethyl methacrylate (HEMA). It polymerizes when exposed to sources of free radicals. EBECRYL® 109 is particularly useful in coatings where a good thermal and/or chemical resistance are important.

PERFORMANCE HIGHLIGHTS

EBECRYL® 109 is characterized by:

- Low viscosity
- Light colour

UV/EB cured products based on EBECRYL® 109 are characterized by the following performance properties:

- Chemical resistance
- Thermal 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® 109 may be applied by lithographic, screen, gravure, direct or reverse roll, and curtain coating methods.
EBECRYL® 109 is recommended for use in:

- Coatings where chemical and/or thermal resistance is required
- Solder and etch resists

TYPICAL VALUE

Appearance	clear liquid
Höppler viscosity at 25°C, mPa.s	± 12
Colour, Apha	max. 50

PHYSICAL PROPERTIES

Density, g/cm^3	1.08
Molecular weight of TMPTA	300
Molecular weight of HEMA	170
Functionality of TMPTA	3
Functionality of HEMA	1
TMPTA, % by weight	± 50
HEMA, % by weight	± 50

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.

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.

STATUTORY LABELING

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