

URETHANE ACRYLATE OLIGOMER

INTRODUCTION

EBECRYL® 8894 is an aliphatic urethane acrylate, diluted in butyl acetate, designed for applications requiring high humidity and abrasion resistance. Films of EBECRYL® 8894 cured via exposure to ultraviolet light (UV) or electron beam (EB) exhibit excellent exterior durability, good toughness and flexibility, as well as the non-yellowing properties typical of an aliphatic urethane.

PERFORMANCE DATA

UV/EB cured products based on EBECRYL® 8894 are characterized by the following performance properties:

- Excellent humidity resistance
- Excellent toughness
- Good abrasion resistance
- Non-yellowing

The actual properties of UV/EB cured formulations containing EBECRYL® 8894 will depend on the selection of the other formulation components, such as co-resins, suitable additives, reactive diluents and photo initiators.

SUGGESTED APPLICATIONS

Formulated UV/EB curable products containing EBECRYL® 8894 may be applied by spray coating, screen, roller and curtain coating methods.

Ebecryl® 8894 is recommended for use in coatings requiring:

- Excellent humidity resistance
- Exterior durability
- Flexibility
- In-mold decoration

PHYSICAL PROPERTIES

Appearance	clear liquid
C&P viscosity at 25°C, mPa.s	~65000
Density, g/cm ³ at 25°C	1.07
Color, Gardner	max. 1
Functionality, theoretical	4
Polymer solids, % by weight	80
Butyl acetate, % by weight	20

TYPICAL CURED PROPERTIES

Young's modulus, MPa	426
Tensile strength, MPa	28
Tensile elongation, %	37
Glass transition temperature, °C	60

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 make use of 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 the Safety Data Sheet for emergency and first aid procedures.

STATUTORY LABELING

Please refer to Safety Data Sheet.