

ALIPHATIC URETHANE ACRYLATE OLIGOMER

INTRODUCTION

UCECOAT® 6570 is a 3 functional aliphatic urethane acrylate oligomer diluted with 5% water. This water dilutable urethane acrylate is particularly useful in screen inks and varnishes for water based applications; giving good water- and solvent resistance after curing by ultraviolet light (UV) or electron beam (EB).

PERFORMANCE HIGHLIGHTS

UCECOAT® 6570 is characterized by:

- Low colour
- High viscosity

UV/EB cured products based on UCECOAT® 6570 are characterized by the following performance properties:

- Good water- and solvent resistance
- Fast curing
- Low MeHQ level

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 UCECOAT® 6570 may be applied by lithographic, screen, gravure, direct or reverse roll, and curtain coating methods.

UCECOAT® 6570 is recommended for use in:

- Screen inks
- Waterbased applications

TYPICAL VALUE

Höppler viscosity at 60°C, mPa.s	6000
Colour, Gardner	max. 2

TYPICAL PROPERTIES

Density, g/cm ³	1.10
Molecular weight, theoretical	ca. 2000
Functionality, theoretical	2 – 3
Polymer solids, % by weight	95

VISCOSITY REDUCTION

UCECOAT® 6570 can be diluted with reactive monomers such as tripropyleneglycol diacrylate (TPGDA)⁽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.

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.