



# **TECHNICAL DATA SHEET**

# **Energy Curable Resins**

# **UCECOAT®** 6569

# **Aliphatic Urethane Acrylate**

## **INTRODUCTION**

UCECOAT 6569 is a water dilutable aliphatic urethane acrylate oligomer containing ~5% water. UCECOAT 6569 can be used to formulate UV/EB curable waterborne wood coatings as well as screen printing inks and varnishes. Cured films containing UCECOAT 6569 demonstrate good adhesion to a variety of wood types, along with good flexibility, resistance to yellowing, and resistance to water and solvents. UCECOAT 6569 based coatings can be re-coated after curing.

#### PERFORMANCE HIGHLIGHTS

UCECOAT 6569 is characterized by:

- High viscosity
- · Light color

UV/EB cured products based on UCECOAT 6569 are characterized by the following performance properties:

- Good adhesion and transparency on wood
- Flexibility
- · Good reactivity
- Resistance to yellowing

The actual properties of UV/EB cured products also depend on the selection of other formulation components such as reactive diluents, additives, and photoinitiators.

## **SUGGESTED APPLICATIONS**

Formulated UV/EB curable products containing UCECOAT 6569 may be applied via direct or reverse roll coating and screen printing methods. UCECOAT 6569 is recommended for:

- · Adhesion primers for wood
- Waterborne screen inks and coatings

#### **VISCOSITY REDUCTION**

UCECOAT 6569 can be diluted with up to 50% by weight water for viscosity reduction. If total water content exceeds 50%, the product stability may be decreased. Viscosity reduction can also be achieved with reactive diluents such as tripropylene glycol diacrylate  $(\mathsf{TPGDA})^{(1)}$ . The product stability should be assessed when using a particular combination of reactive diluent and water.

SPECIFICATIONS <sup>(1)</sup>	VALUES
Color, Gardner scale, max.	2
Viscosity, 60°C, cP/mPa·s	6000-10000

#### **TYPICAL PROPERTIES**

Appearance	Clear liquid
Density, g/ml at 25°C	1.10
Solids content, % by weight	~95

#### STORAGE AND HANDLING

Before using UCECOAT 6569, consult the **Safety Data Sheet** for additional information on safety and handling procedures, and recommended personal protective equipment.

The maximum recommended storage temperature range for UCECOAT 6569 is 4°C to 40°C (39°F to 104°F). Care should be taken not to expose the product to high temperature conditions, direct sunlight, ignition sources, oxidizing agents, alkalis or acids. This might cause uncontrollable polymerization of the product with the generation of heat. Storage and handling should be in stainless steel, amber glass, amber polyethylene or baked phenolic lined containers. Procedures that remove or displace oxygen from the material should be avoided. Do not store this material under an oxygen free atmosphere. Dry air is recommended to displace material removed from the container.

### **PRECAUTIONS**

Avoid contact with eyes, skin and clothing. Direct contact with this material may cause mild eye and skin irritation. Contact with skin may cause a cross-allergic reaction in persons already sensitized to acrylate materials. Wash thoroughly after handling. Use with adequate ventilation. Keep container closed.

Please refer to the **Guide to Safety, Health and Handling of Acrylate Oligomers and Monomers** for additional information on the safe handling of acrylates.

(1) Test methods are available upon request.

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