

Acrylated Polyurethane Dispersion

INTRODUCTION

UCECOAT® 7674 is an acrylated polyurethane dispersion in water designed for waterborne UV/EB curable coatings. UCECOAT® 7674 is anionic in nature, making it compatible with water without any external emulsifier. Due to the presence of these ionic groups, it is not stable under acidic conditions. UCECOAT® 7674 contains no co-solvent. UCECOAT® 7674 exhibits outstanding wetting of wood surfaces, imparting warmth and richness to the appearance of the wood. UCECOAT® 7674 provides hardness in the polymerized coating along with good stain and chemical resistance.

PERFORMANCE HIGHLIGHTS

UCECOAT® 7674 is characterized by:

- Translucent to blueish to white / emulsion
- Very low viscosity
- Tacky after water evaporation and before UV curing. Tacky material can be re-emulsified and reused after filtration
- Very good compatibility, easy formulation

UV/EB cured products based on UCECOAT® 7674 are characterized by the following performance properties:

- Excellent adhesion on wood
- Excellent flexibility
- Outstanding wetting of wood surfaces
- High hardness
- Very low yellowing

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

SUGGESTED APPLICATIONS

Formulated UV/EB curable products containing UCECOAT® 7674 may be applied via spray or curtain coating methods. UCECOAT® 7674 is recommended for:

- Wood primers
- Clear and pigmented wood coatings
- Top coat for wood furniture and doors

TYPICAL VALUES

| | |
|------------------------------------|-----------|
| Appearance | Emulsion |
| pH | 6.4 - 7.8 |
| Solid content, % by weight | 38 - 42 |
| Particle size, nm | max. 150 |
| Viscosity at 25°C, mPa.s | max. 200 |
| Density, g/cm ³ at 20°C | 1.05 |

STORAGE AND HANDLING

Before using UCECOAT® 7674, consult the Safety Data Sheet for additional information on hazards, handling procedures, and recommended protective equipment.

The recommended storage temperature range for UCECOAT® 7674 is ≥4°C (39°F) to ≤40°C (104°F). Protect the product from freezing. Care should be taken not to expose the product to high temperature conditions or direct sunlight. Containers should be kept closed and away from materials that react with water. Bacteriological contamination can occur if the product is stored for an extended period in a container which is not sufficiently sealed or clean. 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. Wash thoroughly after handling. Use with adequate ventilation.

This material should not be stored for more than 1 year.

PRECAUTIONS

Avoid contact with eyes, skin and clothing. Direct contact with this material may cause minimal eye and skin irritation. Repeated or prolonged dermal contact may cause allergic skin reactions.

STATUTORY LABELING

Please refer to Safety Data Sheet.