

# UCECOAT® 7700

Tin-free<sup>(1)</sup> Polyurethane Acrylate Dispersion

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## INTRODUCTION

UCECOAT 7700 is a tin-free version of UCECOAT 7699, a high performance acrylated polyurethane dispersion specifically developed for energy curable pigmented top-coats on wood furniture. It is also suited for clear finishes on wood along with other substrates and applications, such as field applied UV curable coatings for wood, concrete, VCT (vinyl composition tile), and resilient floors. UCECOAT 7700 demonstrates high reactivity, including in thick pigmented coatings, and cured coatings exhibit outstanding scratch and stain resistance.

## PERFORMANCE HIGHLIGHTS

UCECOAT 7700 is characterized by:

- Translucent to white appearance
- Low viscosity
- Tack-free after water evaporation
- Very high reactivity in both clear and pigmented systems
- Excellent stability
- Good compatibility and easy to formulate

UV/EB cured products based on UCECOAT 7700 are characterized by the following performance properties:

- Outstanding hardness and scratch resistance
- Excellent stain resistance

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

## SUGGESTED APPLICATIONS

Formulated UV curable products containing UCECOAT 7700 are typically applied by spray and curtain coating methods due to its low viscosity. It may also be applied by roller and T-bar in field applied applications. For application by roll coater, a viscosity thickener should be added.

UCECOAT 7700 is recommended for use in:

- Pigmented coatings on furniture
- Clear topcoats for wood furniture
- Hard coatings on melamine paper foils and plastic substrates
- Field applied clear coatings on wood, concrete, VCT, and resilient flooring

## SPECIFICATIONS

	VALUE
Appearance	White
Non-volatile matter, %	33.5-36.5
pH	7.0-8.5
Particle size, nm, max.	150
Viscosity, 25°C, cP/mPa·s, max.	200

## TYPICAL PROPERTIES

Density, g/ml at 25°C	1.05
MFFT <sup>(1)</sup> , °C	6
Persoz hardness before UV curing, sec.	135
Persoz hardness after UV curing, sec.	360

## PRECAUTIONS

Before using UCECOAT 7700, see the Safety Data Sheet for information on the identified hazards of the material and the recommended personal protective equipment and procedures.

## STORAGE AND HANDLING

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, or amber polyethylene containers. After prolonged storage product can settle and may require agitation to re-disperse. This product is stable under normal conditions of handling and storage. Do not store this material under an oxygen free atmosphere. Wash thoroughly after handling. Use with adequate ventilation.

See the SDS for the recommended storage temperature range for UCECOAT 7700.

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

(1) Does not contain intentionally added organic tin compounds

(2) Minimum film formation temperature

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