

RADIATION CURABLE POLYURETHANE DISPERSION

INTRODUCTION

UCECOAT® 7689 is a radiation curable polyurethane dispersion which is tack-free after water evaporation. It has been developed for wood joinery topcoat (outdoor) and other outdoor applications. Because of its non-irritant nature and low viscosity, it can be applied safely by spray-, roller- and curtain coating.

PERFORMANCE HIGHLIGHTS

UCECOAT® 7689 is characterized by:

- Translucent appearance
- Low viscosity
- Tack-free after water evaporation

UV/EB cured products based on UCECOAT® 7689 are characterized by the following performance properties:

- Excellent outdoor resistance
- High flexibility
- Good chemical resistance

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

SUGGESTED APPLICATIONS

Formulated UV curable products containing UCECOAT® 7689 may be applied by spray-, roller- and curtain coating methods.

UCECOAT® 7689 is recommended as binder in applications demanding excellent outdoor properties.

TYPICAL VALUES

Brookfield Viscosity at 25°C, mPa.s	max. 500
Appearance	translucent liquid

PHYSICAL PROPERTIES

Density at 25°C, g/cm ³	approx. 1.0
Particle size, nm	< 150
MFFT, °C	6
Solid content, % by weight	approx. 35
pH	7.0 - 8.5
Tg, °C, UV cured	107
Elongation %, UV cured	22
Hardness Persoz, UV cured	135

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. Due to presence of water, UCECOAT® 7689 needs to be stored above freezing temperatures.

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

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

Please refer to Safety Data Sheet.