

# UCECOAT<sup>®</sup> 7705

*UV-curable polyurethane dispersion*

## Technical Data Sheet

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### INTRODUCTION

UCECOAT 7705 is a solvent free, radiation curable polyurethane dispersion, specially developed for high gloss applications on wood and plastics. It exhibits high hardness, good sandability & polishing properties. UCECOAT 7705 is not physically drying before UV curing.

### PERFORMANCE HIGHLIGHTS

UCECOAT 7705 is characterized by:

- Translucent to milky dispersion
- High solid content
- Low viscosity
- Good stability (10d at 60°C)

Radiation cured formulations based on UCECOAT 7705 are characterized by the following performance properties :

- High gloss
- Excellent mirror effect without polishing
- Good stain and solvent resistance
- High hardness & scratch resistance
- Tacky before curing

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



### SUGGESTED APPLICATIONS

Formulated UV/EB curable products containing UCECOAT 7705 may be applied by spray and other application methods.

UCECOAT 7705 is recommended for use in:

- Water based UV wood coatings
- Water based UV protective coatings for plastics

### TYPICAL VALUES

Brookfield viscosity at 25°C, mPa.s :	ca. 100
Solid content, % by weight :	44-46
pH :	6-7.5
Pendulum hardness according to Persoz :	
Before UV-curing :	not physically drying
After UV-curing :	approx. 320 s

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### 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 the presence of water, UCECOAT 7705 needs to be stored above freezing temperatures. Preferred storage temperature is between 10°C and 25°C.

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 6 months. It is recommended to stir the product prior to use.

### 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 LABELLING

Please refer to Safety Data Sheet.

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