

# UCECOAT® 2801

Acrylated Polyurethane Dispersion for WB UV Inkjet

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## INTRODUCTION

UCECOAT 2801 is an acrylated polyurethane dispersion in water designed for waterborne UV/EB curable inkjet inks. UCECOAT 2801 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 highly acidic conditions. UCECOAT 2801 contains no co-solvent. UCECOAT 2801 exhibits good properties concerning the jetting and water resolubility before cure which are key requirements for inkjet application. UCECOAT 2801 provides hardness in the polymerized coating along with good stain and chemical resistance.

## PERFORMANCE HIGHLIGHTS

UCECOAT 2801 is characterized by:

- Very low viscosity
- Tacky after water evaporation and before UV curing
- Tacky material can be re-dispersed and reused after filtration
- Very good compatibility, easy formulation
- GHS label free
- Very good UV reactivity
- Tin and BPA free

UV/EB cured products based on UCECOAT 2801 are characterized by the following performance properties:

- Very good adhesion on multiple substrates (e.g. paper & board, PVC, PC)
- Excellent flexibility
- Outstanding wetting of 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 pigments, co-solvents, reactive diluents, additives, and photo-initiators.

## SUGGESTED APPLICATIONS

Formulated UV/EB curable products containing UCECOAT 2801 are recommended for use in WB UV inkjet application for all colors and spot varnishes.

## TYPICAL PHYSICAL PROPERTIES

## VALUE

Appearance	Translucent bluish to white dispersion
Particle size, nm	80-100
pH	6.4-7.0
Solid content by weight, %	36-39
Viscosity at 25°C, cP/mPa·s	12-20

## PRECAUTIONS

Before using UCECOAT 2801, 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

The recommended storage temperature range for UCECOAT 2801 is  $\geq 4^{\circ}\text{C}$  ( $39^{\circ}\text{F}$ ) to  $\leq 40^{\circ}\text{C}$  ( $104^{\circ}\text{F}$ ). 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, 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.

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

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