

ACRYLATED POLYURETHANE DISPERSION FOR WB UV INKJET

INTRODUCTION

UCECOAT® 2802 is an acrylated polyurethane dispersion in water designed for waterborne UV/EB curable inkjet inks. UCECOAT® 2802 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® 2802 contains no co-solvent. UCECOAT® 2802 exhibits good properties concerning the jetting and water resolubility before cure which are key requirements for inkjet application. UCECOAT® 2802 provides hardness in the polymerized coating along with good stain and chemical resistance.

PERFORMANCE HIGHLIGHTS

UCECOAT® 2802 is characterized by:

- Translucent to bluish / dispersion
- 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
- Label free
- Very good Reactivity with UV
- Tin and BPA free

UV/EB cured products based on UCECOAT® 2802 are characterized by the following performance properties:

- Very good adhesion on multiple different substrates; especially designed for adhesion on plasticized PVC latex.
- Excellent flexibility / adhesion under stress
- 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® 2802 are recommended for use in WB UV inkjet application for all colors and spot varnishes.

TYPICAL PHYSICAL PROPERTIES

pH	6.5 - 7.0
Solid content, % by weight	36 - 40
Viscosity at 25°C/50 rpm, mPa.s	< 1000
Particle size	< 100

STORAGE AND HANDLING

The recommended storage temperature range for UCECOAT® 2802 is $\geq 4^{\circ}\text{C}$ (39°F) to $\leq 40^{\circ}\text{C}$ (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 or amber polyethylene containers. Do not store this material under an oxygen free atmosphere. Wash thoroughly after handling.

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.