MicroCure EVE: UV stable, weather and chemical resistance coating

The MicroCure EVE resin consists of fluoroethylene and alkyl vinyl ether segments. The fluoro-components provide UV-light, weather and chemical resistance. EVE is an excellent ultra-weatherable coating. Applications for EVE include conformal coatings, light duty industrial coatings, and coatings for porous substrates.

Properties:

Shelf life (24 °C): >3 years
Physical Form: Liquid two or three parts
Color: Clear to lightly cloudy
Odor: Solvent odor
Density: 0.98 g/ml
Percent volatile: 60%
Flammable: Yes

Film properties:

Pencil hardness: 4H hard
Pencil hardness: ASTM D3363: Gouge: F
Flexibility: ASTM D4145 Mandrel bend 2T-3T (Paint fracture)
Flexibility: ISO 1520 Cupping test >6mm (cracking)
Impact resistance: ASTM D2794 (Diameter=0.5”) Intrusion 0.5 kg >1.0 m
Cross cut adhesion: ISO 2409 0-1
Formulation Instructions:

- MicroCure-EVE Part-1 is the main resin. For research samples 100 grams of MicroCure-EVE is provided.

- MicroCure-EVE Part-2 is the cross-linker. When ready to apply and cure the coating, add 24.5 grams of part-2 and stir. Work time after adding part-2 is one hour.

- MicroCure-EVE Part-3 is the hardener. If faster curing is desired add 0.65 grams of Part-3 and stir. Work time after adding part-3 is 20 minutes. The coating will take about 24 hours to fully cure and develop its mature properties.