

## Typical chemical and physical properties

ADDAPT<sup>®</sup> PolySurF ACE is a solvent free polymerisable additive. It imparts benefits like: acid resistance, high gloss, excellent pigment wetting, water repellence, film appearance, UV stability and improved adhesion to thermoplastics.

**It is the Acrylic Acid adduct of the epoxy ester of Versatic Acid.**

Appearance	Clear liquid
Odour	Acidic smell
Viscosity at 25 °C (Brookfield #2, 50 rpm)	< 300 mPa.s
Colour	max. 2 Gardner
pH	2.5 to 5.0
Tg of homo-polymer	0 °C
Active content	> 99.5 %

*This information is intended as a guideline only. For specifications please consult the Certificate of Analyses.*

## Applications and typical treat level recommended

- Emulsions for paints, lacquers, printing inks and adhesives	1.0 - 10.0 % wt. based on monomers, hydrophobicity, pigment wetting, gloss
- Synthesis of Acrylic polymers	5.0 – 15% wt
- UV-curable systems	5.0 – 10% wt.

## Benefits

Easy to handle liquid due to the low viscosity

ADDAPT<sup>®</sup> PolySurF ACE improves adhesion to Polyolefin's, Polyethylene Terephthalate and Polyvinylchloride.

Via the Glycidyl ester of Versatic 10 acid (CARDURA<sup>®</sup> E10 moiety), a secondary hydroxyl functional group is introduced, which can be used for crosslinking with melamine or isocyanate resins (automotive topcoats).

Two-pack systems based on ADDAPT<sup>®</sup> PolySurF ACE containing polymers show a very good potlife because the reactivity of the secondary OH group is not too high.

The bulky hydrocarbon group of the Versatic acid provides steric protection to the cured polymer against hydrolysis (good acid resistance), water repellence (hydrophobicity), and good gloss retention and provides excellent pigment wetting.

ADDAPT<sup>®</sup> PolySurF ACE can easily be copolymerised with other acrylic monomers and Styrene.

ADDAPT<sup>®</sup> PolySurF ACE is a very effective co-polymerisable defoamer for water based UV-curable systems where migration of the defoamer is undesirable.

