ADDAPT Chemicals BV

Technical Data Sheet

PolySurf™ ACE
Functional Monomer

Article number: M86400
Verification date: 18/02/2025
Version: 2.1

Typical chemical and physical properties

Solvent-free UV-curable acrylic acid adduct of the epoxy ester of versatic acid. It imparts acid resistance, high gloss, excellent pigment wetting, water repellence, film appearance, UV stability and low viscosity. It enables improved adhesion to polyolefin, polyethylene, terephthalate and polyvinyl chloride. It imparts hydrophobic properties in emulsions and shows good compatibility with VEOVA, styrene, acrylic and methacrylic esters.

Acrylic acid adduct of the epoxy ester of versatic acid.

Appearance	Clear liquid	
Active content	> 99,5%	
Tg of homo-polymer	0 °C	
pH (2 % in water) at 25°C	2,5 - 7,5	
Viscosity at 25°C	<300	mPa·s
Acid value	<40,0	mg KOH

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

Application and treat level

Markets	Emulsion polymerisation industry UV-Coating industry Ink industry
Applications	Radiation-curable systems Adhesives & bonding agents
Recommended dosage/usage	Emulsions for paints, lacquers and printing inks 1,0 - 10,0 % wt. based on monomers Labelling/sticker adhesives (improved adhesion) 1,0 - 10,0 % wt. Synthesis of (styrene-) acrylic polymers 5,0 – 15,0% wt UV-curable systems 5,0 – 10,0% wt. based on monomers

Key benefits

- Inherently biodegradable -

• Polymerisable monomer with excellent pigment-wetting properties.

• Improves adhesion to polyolefin, polyethylene terephthalate and polyvinyl chloride.

• Highly reactive - good compatibility with VEOVA, styrene, acrylic and methacrylic esters.

• Via the Glycidyl ester of Versatic 10 acid (CARDURA® 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 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.

• Can be easily be copolymerised with other acrylic monomers and styrene.

• Very effective co-polymerisable defoamer for water based UV-curable systems where migration of the defoamer is undesirable.

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Safety and Handling Please read Safety Data Sheet (SDS) before handling.

Product Specification This information is available on request through our local representative.

Packaging This information is available on request through our local representative.

Storage The product should be stored at a temperature of no less than 10 °C and no more than 25 °C and away from light. For more safety details read the Safety Data Sheet (SDS)

Quality Policy The objective of our quality policy is the continuous fulfillment of the internal and external requirements agreed upon with our partners with regards to everybody's performance.

The Quality System of ADDAPT® Chemicals BV is based on the principles of the NEN - EN - ISO - Standard 9001:2015.

Liabilities *All recommendations for the use of our products, whether given by us in writing, orally, or to be implied from the results of tests carried out by us, are based on the current state of our knowledge. Notwithstanding any such recommendations, buyer or user remains responsible for satisfying himself that the products as supplied by us are suitable for his intended process or purpose. Since we cannot control the application, use or processing of the products, we cannot accept responsibility thereof. Buyer has to ensure that the intended use of the products will not infringe any third party's intellectual property rights. We warrant that our products are free from defects in accordance with, and subject to, our general conditions of sale and supply.*

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