

Technical Data Sheet

PolySurf™ HPm Functional Monomer

Article number: PO86402 Verification date: 18/02/2025 Version: 2.1

Typical chemical and physical properties

Solvent-free, UV-curable mixture of acrylated mono- and di-phosphate esters. It can also act as a polymerisable lipophilic non-ionic surfactant and/or polymerisable plasticizer PolySurF™ HPm has a higher mono-ester content compared to PolySurF™ HP.

Proprietary mixture of acrylated mono-and di-phosphate esters, where the reactive acrylate group is methacrylate.

Liquid **Appearance** > 99,5% Active content Phosphorus content ~13,5% Density at 25°C 1,25 - 1,35 g/ml Viscosity at 25°C 1250 - 3500 mPa.s Acid number AV1 175 - 225 mg/KOH Acid number AV2 250 - 360 mg/KOH Colour <3.0 Gardner

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 metal primers and finishes

Adhesives & bonding agents

Pigment dispersants

Recommended dosage/usage Emulsions for paints, lacquers, printing inks and adhesives

0,5 - 2,5 % wt. based on monomers

Flame retardant for unsaturated polyesters and polyacrylates

~4,0 % wt. for flame retardant

Adhesion promoter for metal (polyacrylates, polyesters)

~3,0 % wt. based on monomers

Flame retardant and adhesion promoter for UV-curable systems

1.0 - 2.5 % wt. based on monomers

Key benefits

- Readily biodegradable -- Solvent free -- Halogen free -
- It imparts excellent Levelling/Wetting and improves adhesion to metal surfaces in UV-curable systems.
- Addition of approximately 4,0%, results in a final P content of the flame-retardant polyester or polyacrylate of approx. 0,5 %.
- Effective plasticizer. No plasticizer migration occurs after through-cure.
- It improves both the storage and mechanical stability of an emulsion system, whereas grit building and foam formation is minimised.
- · No migration of the surfactant occurs after film formation
- Paints and lacquers based on emulsions containing this "build-in" anionic surfactant show improved wetscrub resistance, improved adhesion to metal and high yellowing resistance even after enamel application.
- The di-phosphate ester affords some degree of crosslinking without gel formation.











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

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

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

The product should be stored at a temperature of no less than 10 °C and no more than 25 °C and away Storage

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.

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from the results of tests carried out by us, are based on the current state of our knowledge.

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