

Typical chemical and physical properties

ADDAPT® PolySurF HPL is a solvent-free UV-curable additive. It can also act as a polymerisable lipophilic non-ionic surfactant and/or polymerisable plasticizer.

It is a proprietary mixture of Acrylated mono-and di-Phosphate ester: the mono-Phosphate ester being O-C₁₂-C₁₄ modified; where the reactive Acrylate group is Methacrylate.

Appearance	Clear liquid
Odour	Sweet smell
Viscosity at 20 °C	50-300 cSt
Solidification Point	ca. 5 – 10 °C
Colour	max. 3 Gardner
pH	0.5 to 4.5
Phosphorus content	ca. 10 %
Active content	> 99.5 %
Storage temp.	20°C

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

Applications and typical treat level recommended

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|--|-----------------------------------|
| - Emulsions for paints, lacquers, printing inks and adhesives | 0.5 - 2.5 % wt. based on monomers |
| - Flame retardant for unsaturated polyesters and polyacrylates | ca. 5 % wt. for flame retardant |
| - Polymerisable Plasticizer for polyacrylates, polyesters, PVC | |
| - Flame retardant and Plasticizer for UV curable systems | |

Benefits

It imparts excellent Levelling/Wetting and improves adhesion to metal surfaces in UV-curable systems.

It is an effective flame retardant, which does not contain halogens. Addition of approximately 5 % results in a final P content of the flame-retardant polyester, polyacrylate or PVC of approx. 0.5 %.

It is an 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 non-ionic surfactant occurs after film formation

Paints and lacquers based on emulsions containing this "build-in" **lipophilic non-ionic surfactant** show improved wet-scrub 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.

ADDAPT[®] PolySurF HPL

Safety and Handling	Please read Material Safety Data Sheet (MSDS) 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	<p>The standard inhibition is 75 ppm MEHQ. The product should be stored at a temperature of no less than 10 °C and no more than 25 °C and away from light. It must be stored under air atmosphere, as the presence of oxygen is essential to activate the stabilizer.</p> <p>Under these conditions, the product is commercially guaranteed for three months after delivery.</p>

Quality Policy	<p>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.</p> <p>The Quality System of ADDAPT[®] Chemicals BV is based on the principles of the NEN-EN-ISO-Standard 9001:2015.</p>
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Liabilities	<p><i>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.</i></p>
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