ADDAPT® PolySurF HPm (Radiation) Curing Additive

Typical chemical and physical properties

ADDAPT® PolySurF HPm is a solvent free UV-curable additive. It can also act as a co-polymerisable anionic surfactant and/or adhesion promoter with flame retardant properties.

It is a proprietary mixture of Acrylated mono-and di-Phosphate ester; where the reactive Acrylate group is Methacrylate. It has a higher mono-content compared to PolySurF HP

Appearance	Clear liquid
Odour	Sweet smell
Viscosity at 25 ºC	< 5000 mPa.s
Colour	max. 3 Gardner
pH	0.5 to 3.0
Phosphorus content	ca. 13 -14 %
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	0.5 - 2.5 % wt. based on monomers
- Flame retardant for unsaturated polyesters and polyacrylates	ca. 4 % wt. for flame retardant
- Adhesion promoter for metal (polyacrylates, polyesters)	ca. 3.0 % wt. based on monomers
- Flame retardant and adhesion promoter for UV curable systems	ca. 1 - 2.5% wt. based on monomers

Benefits

PolySurF HPm promotes adhesion to metal, metal oxides, glass and concrete.

It is an effective flame retardant, which does not contain halogens.
Addition of approximately 4%, results in a final P content of the flame-retardant polyester or polyacrylate of approx. 0.5 %.

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 wet-scrub resistance, improved adhesion to metal and high yellowing resistance even after enamel application

The mono-phosphate ester can be reacted with emulsions containing polymers with 2 or more epoxy groups or with emulsions containing, for example, Glycidyl(Meth)acrylate.

The di-phosphate ester affords some degree of crosslinking without gel formation.

ADDAPT® PolySurF HPm

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

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.

Under these conditions, the product is commercially guaranteed for twelve months after delivery.

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.

ADDAPT Chemicals BV
Speltdijk 1
NL-5704 RJ Helmond
The Netherlands
Tel: + 31 - 492 - 59 - 75 - 75
Fax: + 31 - 492 - 55 - 29 - 55
E-mail: info@addapt-chem.com
Home page: http://www.addapt-chem.com

Publication Number PO86402

Version 4: 2019