

Polyfam[®] MTB

Technical Data Sheet

Characteristics

Polyfam[®] MTB is a self-crosslinking acrylate based aqueous dispersion.

Stabilization

Surfactants

Recommended Application Areas

Pigment printing on woven fabrics

Specification

These technical data are determined for each batch before its release by our quality control laboratory.

	Unit	Value	Dev.
Solids content (ISO 3251: 1h; 105 °C)	%	40 ±	1
Viscosity (ISO 2555; Spindle no. 4; 60 rpm; 23 °C) Brookfield-viscometer LVT	mPa.s (cP)	45 ±	15
pH value (ISO 976)		6.5 ±	0.5

Additional Data

These data are solely to describe the product. They are not subject to constant monitoring or part of the specification.

	Unit	Value
Dispersion		
Minimum film forming temperature (MFFT) (ISO 2115)	°C	< 0
Density (ISO 2811)	g/cm ³	approx 1.05
Film *		
Appearance		slightly opaque and tacky
Glass transition temperature Tg (calculated)	°C	approx -5
Hardness, Koenig (ISO 1522)	s	10
Dried 1hr at 60°C then 24hr at 23±2°C and 50±5% relative humidity (ISO 3270) Tested at 23±2°C and 50±5% relative humidity (ISO 3270)		

This information is based on our present state of knowledge and is intended to provide general notes on our products and their uses. It should not therefore be construed as guaranteeing specific properties of the products described or their suitability for a particular application.

Applications

Polyfam® MTB is a suitable binder for pigment preparations for printing woven fabrics of all types of fiber.

Prints produced with Polyfam® MTB have very high brilliance.

Polyfam® MTB has very good electrolyte stability; its stability is not affected by addition of acids in the concentration required, for instance, for resist prints.

Owing to its very high stability to heat and excellent stability to mechanical stress, Polyfam® MTB is not adversely affected by strong shear forces (such as those exerted in the vessels in which stock thickenings/print pastes are prepared and also during the printing process itself) and the associated increase in temperature.

Print pastes prepared with Polyfam® MTB have excellent printing properties. Moreover, they do not tend to clog screens, even those covered with very fine gauze fabrics.

Processing

Polyfam® MTB can be applied by the usual recipes alone or in combination with Butadiene binders, in oil-in-water emulsions, white-spirit-free synthetic thickeners or in mixtures of the two with a low white spirit content.

Prints produced with Polyfam® MTB have a soft handle, very good general fastness properties and very good stability to light ageing.

The fastness to dry-cleaning of Polyfam® MTB is adequate for many printed articles.

Besides being suitable for direct printing, Polyfam® MTB can also be used for printing by the following methods:

- Coloured discharge printing with Imperon® pigments and Decrolin® (BASF) as the discharging agent on ground shades suitable for acid and neutral discharging (eg Remazol® dyes).
- Resist printing with Imperon® pigments in combination with tartaric acid under Remazol® pad dyeing.

For these methods Polyfam® MTB should be combined with emulsion thickenings or other acid-resistant, low-solids thickenings and the special recommendations regarding the choice of suitable pigments should be observed.

Preservation and Storage

The dispersion contains some initial preservatives to prevent attack by micro organisms. In order that the product is also sufficiently protected against microbial contamination during further storage in opened drums or storage tanks, a suitable preservative should be added despite our preliminary preservation measures and the tanks and pipework should be kept adequately clean.

Prior to use, Polyfam® MTB should be stored for no longer than 9 months at temperatures as constant as possible between 5 and 25 °C and must be protected from frost and direct exposure to sunshine. Furthermore, it must be ensured that already opened drums or containers are always tightly closed.

The technical data ascertained by our quality control laboratory at the time of product release may vary according to the storage conditions and may deviate from the stated limits.

Industry Safety and Environmental Protection

Not a hazardous substance.

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