

# TECHNICAL DATASHEET

## DEMPOL TEXTILE BINDER

### STYRENE ACRYLIC BINDER FOR PRINTING

DEMPOL BINDER TEXTILE IS SELF-CROSSLINKING STYRENE –ACRYLIC ACID ESTER COPOLYMER EMULSION FOR PRINTING.

APEO free - SVHC free.

### EMULSION PROPERTIES

Type of Polymer	: Styrene / Acrylic Acid Ester Copolymer
Solid Content (%)	: 35 +/- 1
pH (at 25°C)	: 5 - 7
Average Particle Size (µm) approx.	: 0.24
Viscosity (Brookfield RVT) (at 25°C)	: < 200 mPas (spindle:2/20rpm)
Stabilizing System	: Anionic-Nonionic
Free Monomer Content (%)	: < 0,3
Density (at 25°C)	: 1.00 -1.04 (gr/ml)
Minimum Film Forming Temperature (°C)	: - 4 (±1)
Film Appearance (at 25°C)	: Clear,slightly sticky, flexible
Glass Transition Temperature (° C)	: -23

### APPLICATION

DEMPOL TEXTILE BINDER possesses all the properties of a styrene acrylic binder, having good all-round fastness to light, abrasion and washing. It has good compatibility with the auxiliaries employed in pigment printing such as acrylic thickeners (e.g. DEMPOL SA 65), alginates and others. In order to increase the fastness properties, especially the rub-fastness of printing, urea formaldehyde or melamine formaldehyde-based crosslinking agents may be added to the recipe. Ammonium sulphate or diammonium phosphate solution (1/3) is recommended as catalyst in case fixation is done by high-temperature steam. Fixation can be executed at 140-150°C for 4-5 minutes. On the other side, hot-air fixation is more preferable to obtain much better fastness. If a softer handle is desired, glycerin may be added to the printing paste.

The viscosity of the print paste can be increased by incorporating DEMPOL SA 65, the acrylic thickener, with a high-speed stirrer. Normally, fatty alcohol/ethylene oxide-based nonionic emulsifiers such as DEMPOL 0930 are suggested to obtain a stable emulsion. The addition of a fixing agent can be particularly effective for improving the wet fastness on cotton. All types of natural and synthetic fibers can be printed on screen, roller and rotary printing machines.

## RECOMMENDED RECIPE

Below is given a recommended recipe for pigment printing paste, which contains high level of white spirit.

* Water	79.5 gr
* Urea	20 gr
* EMULSIFIER DEMPOL 0930	5 gr
* Sodium alginate (4%)	75 gr
* White spirit	685 gr
* Diammonium phosphate solution (1/3)	7 gr
* DEMPOL TEXTILE BINDER	128.5 gr
TOTAL	1000 gr

## SAFETY

**PERSONAL PROTECTION** : Wear suitable protective clothing , gloves and glasses for eye / face protection.

**SKIN CONTACT** : Wash skin as soon as possible with plenty of water.

**EYE CONTACT** : Flush immediately with plenty of water ,keeping eyelids open , for at least 15 minutes. Remove contact lenses . Seek for medical assistance.

## HANDLING & STORAGE

**HANDLING** : Ventilate the working place thoroughly. Avoid contact with skin, eyes and clothes. No eating and drinking in the work place.

**STORAGE** : Stable for 12 months , in close drums at ambient temperature (+5 / +30°C) avoid freezing temperatures and sources of heat and direct sunlight.

## **NOTE**

The above information is based on our knowledge and experience. In view of many factors that may affect processing and application, these data do not relieve end-users from the responsibility of carrying out their own tests and experiments.

### **DEMPOL CHEMICAL CO.LTD**

Organize Sanayi Bölgesi  
ADANA/TURKEY

Tel:00 90 535 849 89 06

E-mail : [mdemirel01@gmail.com](mailto:mdemirel01@gmail.com)  
[mdemirel01@yahoo.com](mailto:mdemirel01@yahoo.com)