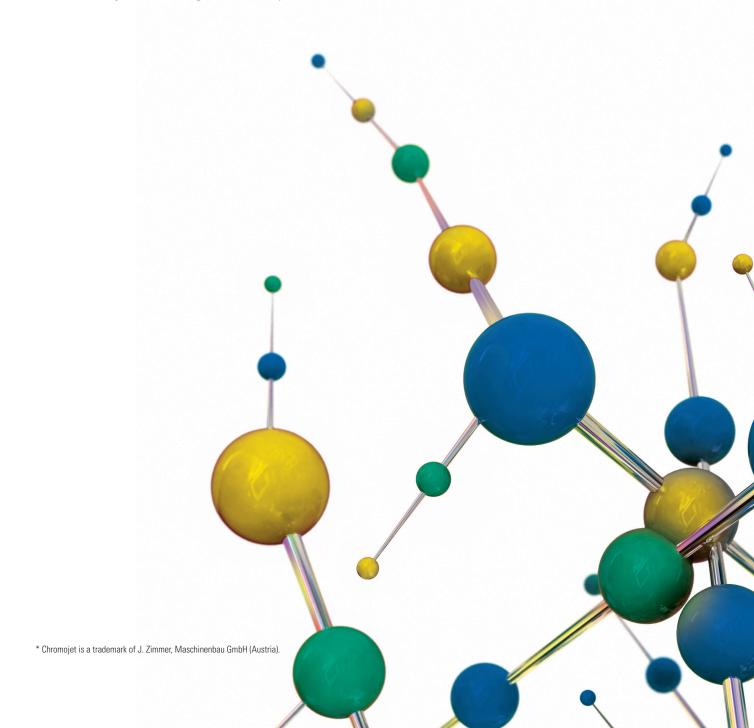


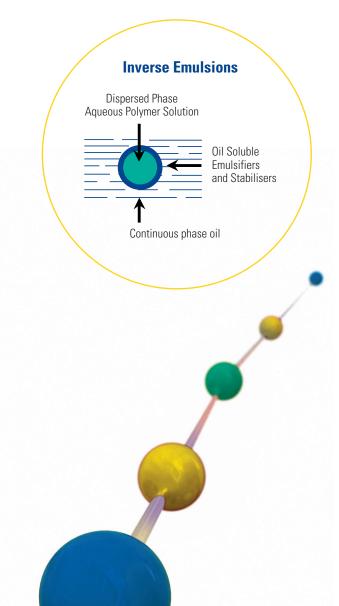
TEXIPOL 67-5055

High Efficiency Inverse Emulsion Thickener for Chromojet* Printing Machinery



TEXIPOL 67-5055

Texipol® 67-5055 is a high efficiency inverse emulsion thickener specifically designed for Chromojet printing. Inverse emulsions differ from conventional emulsions in that they are water in oil emulsions whereas conventional emulsions are the opposite i.e oil in water. This is shown in the diagram below:



Benefits of Texipol 67-5055 Inverse Emulsion Technology

- Low viscosity compared to conventional water soluble polymers — easy to pump and meter
 e.g. can use Supramix system (supplied by J.Zimmer Maschinenbau GmbH, Austria).
- Excellent storage stability with minimal separation and wastage.
- Preneutralised meaning thickening of printing pastes is almost instantaneous and no alkali is needed.
- Specifically designed for jet printing giving sharp well defined prints with excellent colour yield, brightness and handle.
- No jet blocking due to the carefully selected solubility characteristics of the copolymer.

Thus, specialised inverse emulsion manufacturing technology has enabled the manufacture of polymers with optimum performance characteristics and ease of transport, handling, storage and user benefits.

Multifunctional Inverse Emulsions in Chromojet Printing

In general terms the thickener has 2 functions to fulfil in a typical formulation:

- To increase the viscosity to the desired level for printing.
- To modify the flow to ensure optimal printing characteristics.

Additionally the inverse emulsion thickener delivers further benefits:

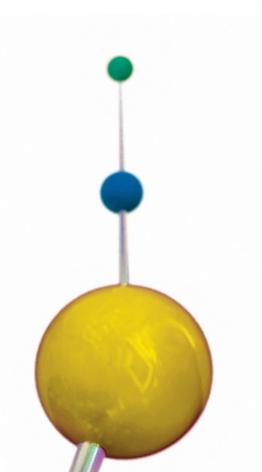
- Acid donor during fixation.
- Humectant, thus improving the fixation in the steamer.

Start Point Formulations for ChromoJet Printing

The following formulations have been put together to offer the ChromoJet user a start-point for the printing of various carpet substrates. Further work will be required to optimise the finish of the printed carpet depending on individual company requirements and quality standards. The Scott Bader applications group will be happy to assist in formulation optimisation by carrying out trials either at the customer premises or at Scott Bader's headquarters using our own printing facilities.

Formulation Notes

- Scott Bader recommends that a stock paste is used when formulating dye pastes for ChromoJet printing. Typical levels of Texipol 67-5055 are around 17 – 20 grams per litre either directly or via SupraMix system.
- For ease of understanding, the start point formulations are presented in a 1000 part format.
- No specific viscosities are given as this will vary depending on carpet type. Texipol 67-5055 works at all viscosities used with ChromoJet printing (50 - 600 cps, Haake/RION typically).
- Dyestuff quantities will depend on customer requirements. Texipol 67-5055 is compatible with all concentrations.



Polyamide

Raw Material	Quantity
Water	Make up to 1000 part
Texipol 67-5055	5.00 - 12.00
Acid/Metal complex dyestuff	0.20 - 3.00

Notes: Typical pH between 5.0 - 5.5

Cotton and Viscose (Cellulosics)

Raw Material	Quantity
Water	Make up to 1000 parts
Texipol 67-5055	10.00 - 12.00
Direct/Reactive dyes	0.20 - 3.00
Sodium Chloride	4.00
Sodium Hydroxide (33%)	Adjust to pH 11 - 12

Notes: The addition of sodium chloride will reduce the viscosity of the print paste. When adjusting the pH to 11 - 12, the viscosity will increase. A small amount of work is required to find the optimum quantity of ingredients to achieve the desired viscosity in the pH range.

Wool

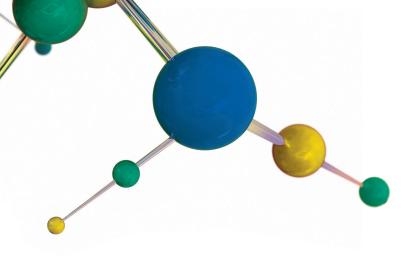
Raw Material	Quantity
Water	Make up to 1000 part
Texipol 67-5055	5.00 - 12.00
Acid/Metal complex dyestuff	0.20 - 3.00
Citric Acid	Adjust to pH 4.0 – 4.5

Notes: Printing wool at pH 4.0-4.5 produces carpet of superior colour brilliancy.

Acrylic

Raw Material	Quantity
Water	Make up to 1000 part
Texipol 67-5055	5.00 - 10.00
Basic Dyes	0.20 - 3.00





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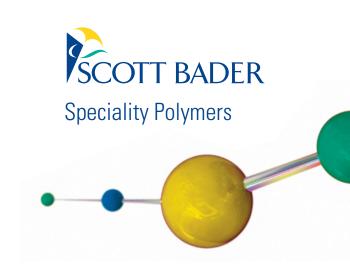
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