

# TEXICRYL<sup>®</sup> 13-809

## Styrene acrylic copolymer emulsion

### INTRODUCTION

TEXICRYL 13-809 is a styrene acrylic emulsion polymer designed for high gloss, water based overprint varnishes and heat resistant inks.

This styrene acrylic binder has been designed to provide superb clarity, water resistance, heat resistance, gloss, sol

### CHARACTERISTICS (Not to be taken as a specification)

Solids content	%	44
Viscosity (DIN #4 flow cup at 20°C)	seconds	75
pH		8.3
Particle size	nm	100
Specific gravity at 25°C	g/cm <sup>3</sup>	1.05
Acid Value	mg KOH/g	65
Minimum film formation temperature *	°C	76
Glass transition temperature	°C	82

\* Determined by metal bar with temperature gradient

## **APPLICATIONS**

Applications for TEXICRYL 13-809 include water based overprint varnishes, as well as flexographic and gravure inks. TEXICRYL 13-809 offers a good combination of high gloss with fast dry, enabling maximised press run speeds. The polymer may be compounded to give a crystal clear dry film improving the depth and intensity of the ink colour underneath. TEXICRYL 13-809 is also compatible with a wide range of fast drying alcohols, and other coalescing solvents. Dowanol DPM is particularly effective as a coalescing solvent. TEXICRYL 13-809 has inherent heat resistance properties, however, heat resistance can be further enhanced if necessary by the addition of Zinc Ammonium Carbonate or Zinc Oxide solution which will crosslink with the carboxyl functionality contained in TEXICRYL 13-809 after evaporation of the ammonia. With it's low odour, TEXICRYL 13-809 is particularly suitable for inks and varnishes used in food packaging where taste and taint must be eliminated.

### **NOTE ON FILM FORMATION**

TEXICRYL 13-809 is a hard resin emulsion which requires the addition of a solvent, plasticiser, or soft polymer to enable film formation at standard application temperatures. If using coalescing solvents, care must be taken when adding the co-solvent; it must be added as the last ingredient, added slowly whilst stirring to avoid solvent shocking. As a nominal guide, 15% of Dowanol DPM added to TEXICRYL 13-809 will enable film formation at room temperature. DPM is a very effective cutting solvent, and other solvents will require higher addition levels to enable film formation at ambient temperature.

## **PACKAGING**

TEXICRYL 13-809 is supplied in drums, 1 tonne IBC's or bulk supplies are delivered by road tanker.

## **STORAGE**

TEXICRYL 13-809 may be stored in the containers in which it is supplied.

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**HEALTH & SAFETY** Please see separate material safety data sheet

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