

# TEXICRYL® 13-811

## **Acrylic Copolymer Emulsion**

#### **INTRODUCTION**

TEXICRYL 13-811 is an aqueous emulsion of an alkali-soluble acrylic copolymer for use in water-based printing inks, in the manufacture of high gloss and other types of emulsion paint, and as a binder for non-woven fabrics.

Key benefits are its excellent rub resistance and transfer properties.

TEXICRYL 13-811 is APEO free.

#### **CHARACTERISTICS**

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

Solids Content	%	41
Viscosity at 25°C (Brookfield RVT, Spindle 2, 100 rpm)	mPa s	100
pH		4
Particle size	nm	80
Specific gravity at 25°C	g/cm³	1.07
Emulsifying system		anionic
Acid value (calculated)	mg KOH/g	62
Minimum film formation temperature*	°C	2
Glass transition temperature	$^{\circ}\mathrm{C}$	30

<sup>\*</sup> Determined by metal bar with temperature gradient.

#### **APPLICATIONS**

TEXICRYL 13-811 is supplied as a 41% solids content emulsion for ease of transportation. In use it is solubilised to a 20-25% solids low viscosity solution by the addition of ammonia or a fixed alkali. Solubilisation is complete at pH 8.5. The conversion will require approximately 2.25% of 35% ammonia, or 1.85% of caustic soda, based on the weight of TEXICRYL 13-811 used, and dilution with the quantity of water required to correctly reduce the solids content.

The ammonium salts of the polymer lose their solubility when dried, by loss of the volatile ammonia, but the sodium salts are permanently water soluble. In the form of its amine salt, TEXICRYL 13-811 is used as a sole or part-binder in water-based flexographic printing inks. It is compatible with shellac.

TEXICRYL 13-811 is one of a complementary series of pigment dispersing and flow promoting additives used in the production of gloss emulsion paints. TEXICRYL 13-811 allows formulating latitude since solubilising amines and wet-edge additives can be chosen by the formulator. Unlike most conventional colloid/wetting agent systems used in gloss and semi-gloss emulsion paints, TEXICRYL 13-811 enhances gloss and levelling properties rather than detracting from them.

When converted to the water-soluble sodium salt, TEXICRYL 13-811 can replace polyvinyl alcohol or carboxy methyl cellulose as a preliminary binder in the production of print- bonded non-woven webs. It has good adhesion to natural and synthetic fibres and confers a softer handle than polyvinyl alcohol.

TEXICRYL 13-811 is solubilised by the natural alkali of Portland cement and confers self-levelling characteristics on cement/sand screeding compounds. It can also be used to seal asbestos cement panels and helps to minimise dangers from free asbestos fibres.

TEXICRYL 13-811 is supplied in drums, 1 tonne IBC's or bulk **PACKAGING** 

supplies are delivered by road tanker.

TEXICRYL 13-811 may be stored in the containers in which it is **STORAGE** 

supplied.

Protect from frost and extended exposure to direct sunlight.

**HEALTH & SAFETY** Please see separate Material Safety Data Sheet.

Issue No.1











