



Speciality Polymers



TEXICRYL®S-12

INTRODUCTION

TEXICRYL S-12 is an alkali-soluble styrene acrylic resin developed for water-based coatings and inks.

The resin is supplied in solid form, and is designed to impart gloss and resolubility to water-based coatings within the graphic arts market.

CHARACTERISTICS

(Not to be taken as a specification)

Appearance	Solid clear flakes	
Solids content	%	97
Acid Value	mg KOHg-1	220
Glass Transition Temperature		105
Molecular weight		12,500
Specific gravity (at 25°C)		1.13

APPLICATIONS

TEXICRYL S-12 is readily let down, at elevated temperature in water, in the presence of Ammonia or other suitable amine. Solutions of the resin must be kept at all times above pH 7, otherwise the resin will tend to revert back to it's solid form.

The solid resin form / geometry is designed to give rapid solubility when made up into solutions.

The solids content of resin solutions based on **TEXICRYL S-12** should be made up at around 30-35% in order to give optimum pigment grinding capability and in the case of clear coatings, maximum solids to give the highest achievable film build. Yet at this level of solids the resin solution will still flow easily and be pump-able.

Resin Solution Start Point Formulation:	
Raw Material	PBW
Water	635.0g
Defoamer	0.01g
Texicryl S12	300.0g
Ammonia Solution 25%	65.0g
TOTAL	1000.0g
pH	9
Viscosity, cPs	6400
<u>Method:</u> Add the Texicryl S12 to the water at room temperature. Stir to ensure complete wetting of the solid resin. Add the ammonia solution. While stirring heat up to approximately 80°C. Stir until the solid resin has completely dissolved. Note: Resin can also be cut under high speed & shear agitation.	

In the resin solution form, TEXICRYL S-12 may be used as a let-down solution to clear coatings (OPV's) and inks. Resin solutions are designed to be compatible with all components commonly used in formulation graphic arts compounds, including the range of TEXICRYL emulsions designed for the graphic arts market, as well as surfactants, additives waxes alcohols and solvents.

TEXICRYL S-12 will impart gloss and resolubility to systems, yet maintaining low foaming and contributing to good printability.

Due to it's high molecular weight, TEXICRYL S-12, is suited well to pigment grinding applications.

PACKAGING

TEXICRYL S-12 is supplied in opaque polyethylene sacks.

Net weight 20 kg per sack; 50 sacks per shrink-wrapped pallet.

STORAGE

Store away from heat source.

HEALTH & SAFETY

Please see separate Material Safety Data Sheet.