CRAY VALLEY

COATING RESINS

TECHNICAL DATA — CRAYAMID 933

SALES SPECIFICATION

Non-volatile content, % @ 150°C (ISO 3251)	100
Viscosity in CPS at 25°C as a solution of 35g resin in 65g of 1:1 toluene : n- butanol (AFNOR XPT51213)	90 - 125
Colour, Gardner scale as a solution of 35g resin in 65g of 1:1 toluene : n- butano (ISO 4630)	≤ 9
Acid value, mg KOH/g (ISO 3682)	7 Max.
Amine value, mg KOH/g	7 Max.
Softening Point	105 - 115

OTHER PROPERTIES

PRODUCT INFORMATION

CRAYAMID 933 is a co-solvent thermoplastic polyamide resin used for the preparation of flexographic and gravure inks. CRAYAMID 933 shows excellent solubility in various solvents that do not attack rubber stereos, excellent gel recovery, and good nitrocellulose compatibility.

Inks prepared on CRAYAMID 933 have good adhesion to a variety of substrates and excellent solvent release, good deep freeze and water resistance , and low odour.

RECOMMENDATIONS FOR USE:
CRAYAMID 933 is a cosolvent polyamide resin used for the preparation of flexographic and gravure inks and over print varnishes and cold seal release lacquers. Because of the soft nature of the polyamide resin they are used in combination with spirit soluble NC (80:20 PA:NC on solids.)
The nitrocellulose should be prepared as a solution with ethyl acetate. The pigment should be dispersed into the nitrocellulose solution.

CRAYAMID 933 should normally be prepared as a solution with suitable solvents. The polyamide solution should be combined with the pigmented nitrocllulose base, and the resulting ink thinned to print viscosity, with the same solvents used to prepare the solution.

Often a small percentage of poly propylene wax (about 0.2%) would be incorporated into the ink formulation to improve slip properties.

PIGMENTATION: Inks prepared on CRAYAMID 933 have excellent stability with a wide range of pigments used in printing ink manufacture. Afew classes of pigments are sensitive to polamide resin systems. Individual examinations of all pigments purposed for use is recommended.

SOLUBILITY: CRAYAMID 933 is soluble in some alcohols and would be used in a blend of solvents. Under certain conditions the solutions form reversible gels on standing. To achieve complete solubility in alcohols it is sometimes necessary to add small percentages of water or aromatic hydrocarbon solvents. **CRAYAMID 933** is insoluble in ethanol, aliphatic and aromatic hydrocarbons. The solubility at 40% NV is noted together with ethanol reducibility and gel recovery and NC compatibility. The effect of hot and cold methods of dissolving the resin are considered.

	40% Non volatile Content		
	1:1 MS: SBP3	N- propanol	Isopropanol
Solubility@ 25c	S	PS	PS
Solubility@ 25c after reflux	S	PS	PS
Recovery@ 25c from gel	80 mins.	No Recovery	No Recovery
NC compatibility in soln.as dry film	PC	PC	Compatibl At low levels

CRAY VALLEY (I) PVT. LTD
D-43(1) MIDC Industrial AREA Navi Mumbai - 400706
TELEPHONE: 55907102-08

ATOFINA