

# CRAY VALLEY

## COATING RESINS

### TECHNICAL DATA

### SYNOLAC 5085

#### SALES SPECIFICATION

#### OTHER PROPERTIES

Non-volatile content, % @ 150°C	94 - 100	Volatile	NA
Viscosity, 25°C, mPas	800-1100	Hydroxyl value, mg KOH/g	250
Maximum colour, Gardner scale (ISO 4630)	3 Max	Hydroxyl Content, %	7.6
Acid value, mg KOH/g (ISO 3682)	5 Max	Density	1.06

Note: Hydroxyl value quoted relative to solid resin.

#### PRODUCT INFORMATION

##### **SYNOLAC 5085 is a equivalent of CRODAPOL5085**

**SYNOLAC 5085** is a solvent free low viscosity linear saturated hydroxyl modified polyester resin (Typical value of Mol.Wt. is 1500).

**SYNOLAC 5085** is a very compatible low viscosity modifier designed for blending with other system to :-

- Increase solid content
- Improves flexibility, even at low temperature.
- Improves wetting of pigment and substrate.
- Improves adhesion and salt spray resistance.
- Improves chemical resistance.

SYNOLAC 5085 is suitable for use with 2-component acrylic or polyester isocyanate systems, high quality stoving system. SYNOLAC 5085 will react into the blended system via it's high hydroxyl content, and will not compromise durability.

#### RECOMMENDATIONS FOR USE:

It is suggested that initial evaluations be carried out using SYNOLAC 5085 at substituted levels of between 5% and 15% of the main binder.

##### (a) 2 – component systems

When used in combination with other hydroxyl containing resins in 2 – component system, SYNOLAC 5085 will react with aromatic isocyanates such as Tolonate HDB and Desmodur N.

The reaction ratios are calculated from the respective equivalent weight or from hydroxy or isocyanate content of the reactants. The relation ship is:

Equivalent weights : Hydroxyl EqW	Isocyanate EqW
(EqW) $\frac{17 \times 100}{\% \text{ OH}}$	$\frac{42 \times 100}{\% \text{ NCO}}$

Recommended ratios using typical isocyanates would be:

	On Solid resin	On solution basis
SYNOLAC 5085	224	224
Desmodur N - 75	191	255
AR - 75	242	323

SYNOLAC 5085 can be successfully at low levels 2 – 3 % in water based systems if it is dispersed into the resin system before neutralisation and addition of water.

##### (b) Stoving systems

when used in combination with other resins in stoving systems, SYNOLAC 5085 will react most MF resins , resin solid ratios are between 70:30 and 85:15 binder to amino are suggested.

##### COMPATIBILITY:

Compatible with many other resins including polyesters, acrylics, isocyanates, melamine, urea, and alkyd resins.

##### SOLVENTS:

Soluble in aromatic hydrocarbons , esters, and ketones. Insoluble in aliphatic hydrocarbons.

##### STORAGE:

SYNOLAC 5085 is supplied at 100% solid and it will tend to get **cloudy or solidify if stored at low temperature** for an extended period of time. **This can be returned back to a clear liquid if warmed gently to room temperature.**

**SYNOLAC 5085** should only be used in applications consistent with the above recommendations. Proposals to use the resin in other ways should be discussed with Cray Valley before any action is taken.

Notes: N – 75 From Bayer  
AR – 75 From CVRIL

December 1999

UPC98729

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