CRAY VALLEY

COATING RESINS

TECHNICAL DATA — SYNOCURE 868S

SALES SPECIFICATION

Non-volatile content, % @ 150°C	58-62
Viscosity in CPS at 25°C	3000-5000
Colour, Gardner scale (ISO 4630)	≤ 1
Acid value, mg KOH/g (ISO 3682)	≤10

OTHER PROPERTIES

Volatile	Xylene / Cellosolve Acetate (2::1)
Non-volatile content, % @ 150°C	60
Flash point, °C (ISO 3679)	31
Density at 20°C (ISO 2811)	1.02
Hydroxyl content, %	2.1
Hydroxyl equivalent weight	800

Note - Hydroxyl content quoted relative to solid resin

PRODUCT INFORMATION

SYNOCURE 868S is a hydroxy lfunctional acrylic resin developed for use in compliant two component systems when cured with polyisocyanate.
SYNOCURE 868S is recommended for the formulations which are crosslink at room temperature with polyisocyanate. It is particularly recommended where flexibility is a major criteria.
Characteristics of SYNOCURE 868S based coatings include:

- Excellent Flexibility
- Excellent Weathering Performance
- To increase flexibility of SYNOCURE 867S and SYNOCURE 862X by mixing SYNOCURE 868S.

RECOMMENDATIONS FOR USE:

REACTION RATIOS: SYNOCURE 868S should be mixed with the selected polyisocyanate just prior to application.
Stoichiometric mixing ratios are recommended to obtain optimum performance. Alternative ratios may be suitable for some applications, but should be evaluated by the coating formulator beforehand.
The reaction ratio is calculated from the respective equivalent weight or hydroxyl and isocyanate content of the reactants. The relationship is:

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

Conventional polyisocyanates such as Desmodur N75 [1] and AR - 75 can be used successfully

	on solid resin	as supplied
SYNOCURE 868S	800	1333
AR – 75	242	323
N- 75	191	255

SOLVENTS: The solvents chosen for paints and lacquers based on SYNOCURE 868S should be free of water and should not contain groups that react with isocyanates.

POT LIFE: SYNOCURE 868S reacted with N-75MX and AR – 75 in stoichiometric proportions has a usable pot life at spraying viscosity in excess of a full working day at normal room temperature. The use of catalysts or higher temperatures will reduce this storage period, although paints will still remain usable for several hours.

CATALYSTS: To increase the initial rate of cure of SYNOCURE 868S based paints, at both ambient temperature and under low bake conditions, the use of tin catalyst in the form of dibutyl tin dilaurate is strongly recommended. The level used will depend on specific requirements, but the recommended minimum level would be 0.001% tin calculated on total solid resin plus isocyanate.

UV ABSORBERS: To optimise the performance of SYNOCURE 868S, when used in a clear varnish formulation, the use of Tinuvin 1130 [3] and Tinuvin 292 [3] in a 1:1 ratio is recommended.

SYNOCURE 868S 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 CVRIPL
UV Absorbers From Cieba

The information contained in this document is based on trials carried out by our Technical centres and data selected from literature, but shall in no event be help to constitute or imply any warranty, undertaking, expressed or implied commitment from our part. Our formal specifications define the limit of our commitment. No liability whatsoever can be accepted by CRAY VALLEY with regard to the handling, processing or use of the product or products concerned which must in all cases be employed in accordance with all relevant laws and/or regulations in force in the country or countries concerned.

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

ATOFINA