

SYNOCURE® 890 S 55

PROTECTIVE & MARINE COATINGS

ARKEMA COATING RESINS

Product Application details

SYNOCURE® 890 S 55 is an acid functional acrylic resin for use with the epoxy copolymer curing agents SYNOCURE® 899 BA 60 or SYNOCURE® 899 BA 70 LM in isocyanate-free two pack coating systems.

Two pack coating systems based on SYNOCURE® 890 S 55 are especially suitable for transport vehicles, agricultural equipment and high quality maintenance coatings.

Performance Benefits

- Fast cure
- Excellent solvent resistance
- Very good exterior durability
- Low VOC possible

Polymer Type

- Solventborne Acrylic

Sales Specifications

Solid Content at 125°C, % (ISO 3251)	53 - 57
Viscosity at 25°C, mPa.s (ISO 12058-1)	2000 - 3000
Colour, Gardner scale (ISO 4630)	2 max
Acid value, mg KOH/g (ISO 2114)	14 - 16.5

Other Characteristics¹

Volatile	Xylene : butyl acetate : aromatic solvent 160°C - 180°C : isobutanol 4:4:2.5:1
Flash point, °C (ISO 3679)	24
Density / Specific Gravity at 20°C, g/ml (ISO 2811)	1.00

Note: Acid value and/or Hydroxyl value quoted relative to solid resin

¹ The data provided for these properties are typical values, intended only as guides, and should not be construed as sales specifications

RECOMMENDATIONS FOR USE

SYNOCURE® 890 S 55 is an acid functional acrylic resin with superior hardness. To achieve more flexible finishes SYNOCURE® 890 S 55 can be blended with SYNOCURE® 895 S 55.

SYNOCURE® 890 S 55 is designed exclusively for use with SYNOCURE® epoxy functional acrylic resins supplied by Arkema and should not be used in other non-isocyanate systems.

SYNOCURE® 895 S 55 can be cured with SYNOCURE® 899 BA 60 but use of the higher solids hardener SYNOCURE® 899 BA 70 LM allows VOC reductions of up to 50 g/l to made at application viscosity.

SYNOCURE® acid functional acrylic resins are cured with the SYNOCURE® 899 series epoxy curing agents. The recommended mixing ratios are:

Formulation Guidelines

	as supplied	on solid resin
SYNOCURE® 890 S 55	100	3
SYNOCURE® 899 BA 60	30	1
SYNOCURE® 899 BA 70 LM	26	1

Minor deviations from this ratio will have little effect on film performance although it is preferable that paint formulations are based on the recommended ratio to maintain performance.

Further information on use may be found in the brochure 'Non-Isocyanate Acrylic resins for 2K Coatings' available from Arkema Coating Resins.

This isocyanate-free system is suitable for use with a wide range of both organic and inorganic pigments. However, as with other reactive two component systems there are rare instances of reaction between the resins and certain pigments to give unacceptable colour changes on curing.

SYNOCURE®

It is therefore strongly recommended that all pigments are checked for stability with the system before commercialisation.

SOLUBILITY

Aromatic hydrocarbons such as xylene, together with minor proportions of alcohols and esters are the most suitable solvents.

OTHER ADDITIVES

Where UV absorbers may be required, as in clear varnish applications, then conventional UV absorbers such as the benzotriazole types are not recommended as they can cause discoloration of the clear varnish.

Product Safety

Please refer to the corresponding Safety Data Sheet.

Storage & Handling

SYNOCURE® 890 S 55 should be stored indoors in the original, unopened and undamaged container, in a dry place at a temperature not exceeding 30°C. Exposure to direct sunlight should be avoided.

In the above mentioned storage conditions the shelf life of the resin will be 12 months from the shipping date

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