

PRODUCT DESCRIPTION

MYCOAT 137 resin is a methylated, n-butylated benzoguanamine-formaldehyde crosslinking agent with a high degree of alkylation, a low methylol and low imino functionality.

The methoxy and butoxy functionalities are also reactive with the carboxyl groups of backbone polymer, providing an excellent balance of film flexibility and improved resistance properties.

MYCOAT 137 resin is suitable for a wide range of general industrial heat cure finishes, providing high detergent and chemical resistance properties.

BENEFITS

- Lower free formaldehyde
- High detergent and chemical resistance
- Non solvent

APPLICATION AREAS

- General industrial coating for primer
- S/b external can coatings

PHYSICAL PROPERTIES

Appearance	Clear Liquid	Visual
Non-volatile by wt.	≥ 97%	Pan, 180 min/105°C
Viscosity, 25°C	T – Z	Gardner Holdtz Method
Free formaldehyde	< 0.1%	Sulfite Method
Color, Gardner	≤ 1	ISO 4630-2

SOLUBILITY

Alcohols	Complete
Esters	Complete
Ketones	Complete
Aromatic hydrocarbons	Complete
Aliphatic hydrocarbons	Partial
Water	Insoluble

COMPATIBILITY

Acrylic resins	Very good
Alkyd resins	Very good
Epoxy resins	Very good
Polyester resins	Very good

BACKBONE POLYMER SELECTION

MYCOAT 137 resin is a very effective crosslinking agent for backbone polymers containing hydroxyl, carboxyl or amide functional groups such as epoxy, alkyd/polyester or acrylic resins.

CATALYSIS

MYCOAT 137 resin responds best to strong acid catalysts, like CYCAT®4040, CYCAT 600 or CYCAT 500 catalyst. Generally 0.5 to 1.0% catalyst solution on total binder solids is sufficient to provide good cure at baking schedules of 20 minutes at 140 - 160°C.

Acid catalyzed MYCOAT 137 resin systems have to be stabilized with primary alcohols, amines or with a combination of these.

For water borne systems, pH 7.0 - 8.5 should be maintained to achieve stability.

FORMULATION STABILITY

MYCOAT 137 resin is insoluble in water. Due to its hydrophobic nature, MYCOAT 137 has to be dissolved initially in the organic phase of the water reducible backbone polymers.

STORAGE STABILITY

MYCOAT 137 resin has a shelf life of 1 year from the date of manufacture when stored at temperatures between 5°C and 30°C packed in unopened original containers. MYCOAT 137 resin must be kept indoors and avoided the direct sunlight exposure.

Although lower temperatures are not detrimental to stability, its viscosity will increase, possibly making the resin difficult to pump or pour. The viscosity will reduce again on warming, but care should be taken to avoid excessive local heat as this can cause an irreversible increase in viscosity.