

Product Information

Moldmaking Materials

Dow Corning® HS Sprayable Catalyst – Colored/Clear

FEATURES

- Good initial flow-out for capturing fine details
- Thixotropic character for even film build on vertical surfaces
- Low viscosity for easy mixing, pumping and spraying
- Fast tack-free time for speedy processing

COMPOSITION

- Liquid catalyst

Catalyst formulated to provide special characteristics for tooling and animatronic skin applications

USES

Dow Corning® HS Sprayable Catalyst – Colored/Clear has been formulated for tooling and animatronic skin applications.

TYPICAL PROPERTIES

These values are not intended for use in preparing specifications.

| Test | Unit | Result | |
|---|---------|--|---|
| | | Colored | Clear |
| As Supplied | | | |
| Color | | Purple | Clear |
| Specific Gravity | | 1.01 | 1.01 |
| Viscosity | cP | 19 | 21 |
| | | <i>Dow Corning</i> ® HS II w/ Colored Base | <i>Dow Corning</i> ® HS III w/ Clear Base |
| As Mixed – 10:1 by weight with <i>Dow Corning</i>® HS Base | | | |
| Snap Time at 24°C (75°F) and 50 percent RH | | | |
| | minutes | 20 | 20 |
| Tack-Free Time | minutes | 40-60 | 40-60 |
| Demold Time | hours | 16 | 16 |
| As Cured – 24 hours at 24°C (75°F) | | | |
| Durometer Hardness, Shore A | points | 22 | 10 |
| Tensile Strength | psi | 550 | 380 |
| Tear Strength, Die B | ppi | 120 | 110 |
| Elongation | percent | 480 | 640 |
| Build-up Thickness | mils | 60-120 | 80-120 |

Specification Writers: Please obtain a copy of the Dow Corning Sales Specification for this product and use it as a basis for your specifications. It may be obtained from any Dow Corning Sales Office, or from Dow Corning Customer Service in Midland, MI. Call (517) 496-6000.

DESCRIPTION

Dow Corning HS Sprayable Catalyst – Clear is recommended with *Dow Corning*® HS III RTV High Strength Moldmaking Silicone Rubber base for creating animatronic skins. The clear catalyst, when mixed with the white base, results in a white final product that is easily painted using either *Dow Corning*® 92-009 Dispersion or *Dow Corning*® 734 Sealant – Clear with pigments or dyes added.

For tooling applications, *Dow Corning* HS Sprayable Catalyst – Colored is best suited for use with *Dow Corning*® HS II RTV High Strength Moldmaking Silicone Rubber base due to the preference for a higher durometer.

USE LIMITATIONS

This product is neither tested nor represented as suitable for medical or pharmaceutical uses.

HOW TO USE

Surface Preparation

Surfaces of the parts to be sprayed should be dry, clean and free from any loose particulates. For highly detailed parts, a release agent can be applied to ease demolding.

Common release agents include petroleum jelly (often 5-10 percent dissolved into a solvent such as mineral spirits or naphtha) or lacquers, fluorinated release sprays or talc.

Application

With any catalyst, it is always good practice to shake well before using. This is especially true when using *Dow Corning HS Sprayable Catalyst* – Colored to easily and uniformly redisperse the pigment.

For hand lay-ups, thoroughly mix 10 parts by weight of selected *Dow Corning HS* base with 1 part of *Dow Corning HS Sprayable Catalyst* (this mixture can be deaired if deemed necessary). For spray applications, the mixing takes place in a static mixer just prior to the spray nozzle.

Once mixed, the low viscosity ingredients quickly become thixotropic. They will thin out under the shear of pumping and spraying, but will rapidly become essentially non-slump. This allows approximately 60 to 120 mils of material to be applied per spray with low sag or run off.

At approximately 24°C (75°F) and 50 percent relative humidity, the mixed material has a snap time of 10 to 45 minutes, after which additional coats or layers can be

applied. The rubber typically becomes tack-free in less than two hours and is demoldable in about 16 hours. Higher temperatures and humidities can significantly accelerate the cure. The reverse is also true for deceleration of cure.

SHIPPING LIMITATIONS

None.

STORAGE AND SHELF LIFE

When stored in its original unopened container below 32°C (90°F), *Dow Corning HS Sprayable Catalyst* has a shelf life of 10 months from date of manufacture. Refer to product packaging for “Use By” date. Shake well before use. Containers should be kept tightly closed when not in use. Moisture contamination will slow the cure, so minimize exposure of the material to air prior to use. Purging the opened container with dry nitrogen after each use can prolong the usable life of the material. Refrigerated storage is not required, but as with most products, it can prolong shelf life.

PACKAGING

Dow Corning HS Sprayable Catalyst is available in 4.4- and 44.1-lb (2- and 20-kg) containers.

SAFE HANDLING INFORMATION

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED. BEFORE HANDLING, READ PRODUCT AND MATERIAL SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION. THE MATERIAL

SAFETY DATA SHEET IS AVAILABLE FROM YOUR DOW CORNING REPRESENTATIVE, OR DISTRIBUTOR, OR BY WRITING TO DOW CORNING CUSTOMER SERVICE, OR BY CALLING (517) 496-6000.

LIMITED WARRANTY – PLEASE READ CAREFULLY

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