



# StyroCoat®

## Sprayable Plastic Coating

### PRODUCT OVERVIEW

StyroCoat® Plastic is a sprayable polyurethane plastic formulated to economically coat a variety of surfaces.

Dispensed through Smooth-On's EZ~Spray®, Jr. cartridge system, the plastic cures in about 2 seconds and can be applied to vertical surfaces without running off. An advantage of the system is that large areas can be covered in a short period of time. Cured plastic is lightweight, impact resistant, and water resistant. It can be sanded for priming and painting. Plastic can also be sprayed into a rubber mold to make fast, impact resistant castings (application of a release agent may be necessary before spraying into the mold).

StyroCoat® Plastic is used for theme design / fabrication applications, making movie and theater set environments, making surfaces water resistant and other industrial applications.

### TECHNICAL OVERVIEW

**Key Values:** ~*Mixing Ratio:* One to One by volume. ~*Color:* Off-White ~*Durometer:* Shore 80D  
~*Pot Life:* 2 Seconds When Mixed ~*Handling Time:* About 1 Hour (Depending on Mass)

**Description:** EZ~Spray® StyroCoat® Plastic consists of two liquid components, Part A (Yellow Label) and Part B (Blue Label). When combined in a mixing ratio of one to one by volume, EZ~Spray® Plastic quickly cures to a solid and durable plastic.

COMPONENTS	VISCOSITY	S.G. g/cm <sup>3</sup>	S.V. cu. in./lb.
Part A	240 cps		
Part B	730 cps		
Mixed Part A + B	variable	1.12	24.73

**Ultimate Tensile Strength:** 2,469 psi after 1 day---3,173 psi after 7 days      **Shore D Hardness:** 80  
**Modulus:** 48,509 psi after 1 day---63,630 after 7 days

### Applying A Release Agent

### Mixing

**Preparation . . .** Materials should be stored and used at room temperature (72° F / 22° C). This product has a limited shelf life and should be used as soon as possible. Spraying should be done in a well-ventilated area.

**Breathing protection:** Anyone in the spray area must wear an independent air supplied hood or NIOSH approved breathing mask. Wear safety glasses, long sleeves and rubber gloves to minimize contamination risk. **Because no two applications are quite the same, a small test application to determine suitability for your project is recommended if performance of this material is in question.**

**Applying A Release Agent . . .** A release agent is necessary to facilitate demolding when spraying over most surfaces. Use a release agent made specifically for mold making (Universal® Mold Release) available from Smooth-On or your Smooth-On distributor). A liberal coat of release agent should be applied onto all surfaces that will contact the plastic. **~IMPORTANT:** To ensure thorough coverage, lightly brush the release agent with a soft brush over all surfaces. Follow with a light mist coating and let the release agent dry for 30 minutes.

**Remember, StyroCoat® Plastic sets up immediately.**

## *Spraying*

## *Coverage*

## *Curing*

## *Performance*

***Spraying.*** . . . Spray on a thin first coat, moving quickly. Spray undercuts and recesses first. Wait two minutes between first and second coats. Heat from the first coat will speed the cure of the others. Spray bottom edges with many thin coats to avoid drips and voids. Work from bottom to top. Increase the pressure for heavier coats. Consult **EZ~Spray® Jr. Instruction Manual & Video** for more tips on being successful with this system.

***Rate Of Coverage . . .*** Each cartridge of StyroCoat® contains 3.75 lbs. / 1.7 kgs.. of material. Assuming a thickness of 0.1 inches (0.25 cm), one cartridge of StyroCoat® will cover approximately 6.43 sq. ft. (0.6 square meters).

***Curing . . .*** Plastic will harden immediately and can be demolded in about one hour depending on mass and configuration.

***Performance . . .*** Cured plastic is rigid and durable. It resists moisture, moderate heat, solvents, dilute acids and can be sanded, machined; primed/painted or bonded to other surfaces (any release agent must be removed). If sanding or machining, wear dust mask or other apparatus to prevent inhalation of residual particles. Plastic can be displayed outdoors after priming and painting. Unpainted castings will yellow when exposed to ultra-violet light. Because no two applications are quite the same, a small test application to determine suitability is recommended if performance of this material is in question.

## *Safety First!*

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The material safety data sheet (MSDS) for this or any Smooth-On product should be read before using and is available on request. All Smooth-On products are safe to use if directions are read and followed carefully.

***Be careful.*** EZ~Spray® StyroCoat Part A (Yellow Label) contains methylene diphenyldiisocyanate. Vapors, which can be significant when prepolymer is heated or sprayed, may cause lung damage and sensitization. Use only with adequate ventilation. Contact with skin and eyes may cause severe irritation. Flush eyes with water for 15 minutes and get immediate medical attention. Remove from skin with soap and water. Part B (Blue Label) is irritating to the eyes and skin. Avoid prolonged or repeated skin contact. If contaminated, flush eyes with water for 15 minutes and get immediate medical attention. Remove from skin with soap and water. When mixing with Part A, follow precautions for handling isocyanates. If machining cured EZ~Spray® StyroCoat®, wear dust mask or other apparatus to prevent inhalation of residual particles.

***Important*** - The information contained in this bulletin is considered accurate. However, no warranty is expressed or implied regarding the accuracy of the data, the results to be obtained from the use thereof, or that any such use will not infringe a copyright or patent. User shall determine suitability of the product for the intended application and assume all associated risks and liability.

***Call Us Anytime With Questions About Your Application.***

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