#### EPOXY

## **TECHNICAL DATA**

#### **CS-16**

# 

# 6500 SYSTEM HIGH TRAFFIC EPOXY FLOOR COATING

# **DESCRIPTION AND USES**

The 6500 System High Traffic Epoxy Floor Coating is a two component, low odor, low VOC 100% solids epoxy floor coating for heavy duty protection.

This coating system is designed for new or old uncoated or previously coated industrial concrete floors exposed to heavy foot and rubber-tired vehicle traffic. The coating is also suitable for use in areas of intermittent chemical spills, splashes and power washings. The coating has excellent abrasion, impact and chemical resistance.

**NOTE:** For striping lines use 9100 High Performance Epoxy, except colors made with 9107 tintbase.

**NOTE:** Risk of batch-to-batch color variation can be reduced by use of a single lot or batch code whenever possible. Finish and surface texture of the concrete can alter the appearance of the coating.

**NOTE:** Slight variations in the appearance of the coating may be seen when viewing large open areas of the coated concrete floor.

### PRODUCTS

S6501	Activator
S6568	Tile Red
S6571	Dunes Tan
S6582	Silver Gray
S6586	NavyGray
S6592	White
S6510	Clear

# **RECOMMENDED PRIMER**

S6511 Penetrating Prime & Seal  $\ensuremath{^{\text{\tiny M}}}$  Primer. Only required on bare concrete.

# PACKAGING

#### 1-Gallon Activated Size:

Activator: 0.38 gal. in a 1 gallon container

Base Component: 0.62 gal. in a 1 gallon container

# APPEARANCE

High-gloss finish.

# **COMPANION PRODUCTS**

5499 Concrete Patching Compound Turbokrete<sup>™</sup> Concrete Patching Compound

# **PRODUCT APPLICATION**

#### **SURFACE PREPARATION**

NEW, UNCOATED CONCRETE: New concrete should be allowed to cure for a minimum of 30 days before application of any coating. If there is any doubt about the dryness of the concrete, conduct a test by simply placing a weighted rubber mat, plastic sheet or other non-porous material on the surface for 24 hours. Check the underside of the mat and concrete for signs of moisture. The substrate will be darker if damp. If moisture is found, allow additional drying time (10-14 days) and repeat test. If moisture persists, concrete surface cannot be coated. Remove oil, dirt, grease and other chemical contaminants by cleaning with Pure Strength® 3599 Industrial Cleaner/Degreaser, detergent, or other suitable cleaner. Rinse with water. Etch concrete with 108 Cleaning & Etching Solution. Rinse thoroughly and immediately, and allow to dry. Very dense, non-porous or chemically treated concrete may require acid etching, abrasive blasting or sanding to assure proper coating adhesion. Determine porosity by pouring one ounce of water onto the concrete. If water soaks in, the surface is porous enough for coating. If water beads up on the concrete, the surface is not porous and treatment is warranted. The presence of laitance (fine white particles) will also require acid etching, abrasive blasting, sanding or abrading to assure removal.

PREVIOUSLY COATED CONCRETE: Remove loose dirt, dust and paint by sweeping or vacuum cleaning. Remove grease, oil, floor compound or wax as indicated above, in the **new, uncoated concrete** section. Very glossy or hard coatings should be lightly sanded to insure maximum adhesion. The 6500 system will not lift most previous coatings. Concrete floor areas which require patching should be free of dirt, oil, grease and other chemical contaminants as indicated above, in the **new, uncoated concrete** section. Loose cement and previous paint should also be removed. The 5499 Concrete Patching Compound, or Turbokrete<sup>™</sup> Concrete Patching Compound can be used to repair damaged areas of the floor. Refer to the product Technical Data Sheet for more information.

# **TECHNICAL DATA**

# 6500 SYSTEM HIGH TRAFFIC EPOXY FLOOR COATING

# PRODUCT APPLICATION (cont.)

#### MIXING

Hand mixing is not adequate. You must combine the base and activator by power mixing using either a 3" Jiffler Mixer or Hanson Plunge Mixer. Mix at 500-750 rpm for 1-3 minutes. Do not overmix or use higher speeds. This can introduce air into the coating causing small bubbles in the finish.

Start mixing the S6500 Base component and immediately add the S6501 Activator. It is very important to transfer as much activator as possible, scrape the sides and bottom of the container thoroughly. Mix the two components together for 1-3 minutes being careful to not pull air into the mixture.

Immediately pour the mixture out onto the marked off area of the floor in a long thin stripe. Do not try to work out of the container or put the material in a roller pan as heat will build up and shorten pot life and work time, and could be hazardous. The material on the floor will be workable for about 20 minutes.

NOTE: Do not scrape the sides or bottom of the container. Use only the material that flows naturally out of the container. Also, do not turn the container upside down and leave on the floor to drain. Doing so may result with unactivated material from the sidewall of the container being applied. This will cause soft spots in the coating.

#### APPLICATION

Apply only when air, material and floor temperatures are between 60-90°F (15.5-32°C). Because of the short pot life, it is recommended the application of the coating be limited to small sections. One activated gallon of 6500 System will cover 100 square feet at 16 mils. For best performance of the 6500 System, a film thickness of 16 mils is required. This can be achieved with a single coat application, however, on bare concrete there is a risk of outgassing from small pinholes and voids in the concrete during the curing of the coating which will form outgas bubbles in the finish.

To greatly reduce the risk of outgas bubbles we recommend that bare concrete be first primed with S6511 Penetrating Prime & Seal<sup>™</sup> Primer. Refer to the Technical Data Sheet for the primer for more information and application instructions.

NOTE: Outgassing only occurs when there is a rise in temperature causing airtrapped in pinholes to expand. The risk of outgas bubbles can also be reduced by avoiding application of the coating during times of the day where temperatures may increase.

After the primer has cured, mark off the floor into 100 square foot sections. Coating this area with one gallon of activated 6500 System finish will yield a film thickness of 16 mils. On previously coated floors where outgassing is not a problem, the 6500 System can be applied directly to the floor in a single coat application of 16 mils. Mark out the floor into 100 square foot sections for coverage with one gallon of activated material.

# **PRODUCT APPLICATION (cont.)**

After pouring the material onto the floor, use a rubber squeegee to spread the material out over the entire section. Roll the material smooth using a shortnap (3/16-3/8") lint free roller with a phenolic core. Make all final passes parallel and in the same direction. Do not roll excessively and do not re-roll the material after the final passes are made. Doing so may result in colorvariations.

NOTE: Change the roller cover every 30 minutes and always mount it on the roller frame in the same direction.

After completing the section repeat the process on the adjacent section, overlapping the prior application approximately 6 inches to blend the coating together. Natural breaks in the floor, such as control joints or expansion joints, should be used as stopping points if the entire floor can not be completed in one day. The coated floor will be ready for foot traffic 10 hours after application of the final coat. The coating will be ready for full use in 48-72 hours at 70-80°F and 50% relative humidity. Do not detergent wash the floor for 5 days after application.

#### **NON-SLIP SURFACES**

To obtain a non-slip surface, a two coat application is required. The same basic procedure is followed as for application of the regular high gloss finish. Apply the first coat of 6500 at 16 mils, 1 activated gallon per 100 square foot section, by rubber squeegee and roller. Within 30 minutes after rolling of the first coat, broadcast silica, totally saturating the coated surface. If the floor is being coated in multiple sections, then leave a 6-12 inch area unsanded along the edge of the section to allow for blending of thecoating in the next section. Use 50 lbs of round particle, 20-40 mesh sand (like Wedron 480) per 100 squarefoot section. After 4-8 hours sweep off the excess silica thoroughly. Apply a second coat of 6500 within 10-24 hours at the same spread rate of 16 mils. or 1 gallon per 100 square feet. This second coat anchors the silica and improves the appearance while maintaining the non-slip surface. The floor will be ready for foot traffic in about 10 hours after the application of the second coat, and is ready for full use in 48-72 hours. Do not detergent wash for 5 days after application.

#### THINNING

Not required.

### **CLEAN-UP**

160 Thinner.

#### **EQUIPMENT RECOMMENDATIONS**

SQUEEGEE: Use a high quality rubber squeegee.

ROLLER: Use a high quality short nap (3/16-3/8") lint-free roller with a phenolic core.

# 6500 SYSTEM HIGH TRAFFIC EPOXY FLOOR COATING

# **PHYSICAL PROPERTIES**

Resin Type		Polyamine converted epoxy
Weight*	Per Gallon	9.2-10.0 lbs.
	Per Liter	—
Solids*	By Weight	100%
	By Volume	100%
Volatile Organic Compounds*		<100 g/l (0.83 lbs./gal.)
Recommended Dry Film Thickness (DFT) Per Coat		High gloss finish: 16 mils (400µ) Non-slip finish: 16 mils (first coat) (with silica broadcast); 16 mils (second coat)
Wet Film to Achieve DFT		Same as dry film thickness
Theoretical Cove 1 mil DFT (25µ)	rage at	1604 sq. ft./gal. (39.5 m²/l)
Practical Coverage at Recommended DFT		300 sq.ft./gal. (7.4 m²/l) at 5 mils (125μ) 200 sq. ft./gal. (4.9 m²/l) at 8 mils (200μ) 150 sq. ft./gal. (3.7 m²/l) at 11 mils (225μ) 100 sq. ft./gal. (2.5 m²/l) at 16 mils (400μ)
Mixing Ratio		1.6:1 base to activator
Induction Period		None
Pot Life <sup>†</sup>		30 minutes maximum
Dry Times at 70-80°F (21-27°C) and 50% Rel. Hum.	Recoat	10-24 hours
	Light traffic	10 hours
	Vehicle traffic	48-72 hours
Shelf Life		3 years
Safety Information	Flash Point	>212°F (100°C)
	Contains	—
	Warning!	CAUSES NOSE, THROAT, EYE AND SKIN IRRITATION. CAUSES EYE AND SKIN BURNS. HARMFUL IF SWALLOWED. MAY CAUSE ASTHMA, SKIN SENSITIZATION OR OTHER ALLERGIC RESPONSES. FOR INDUSTRIAL OR COMMERCIAL USE ONLY. KEEP OUT OF REACH OF CHILDREN. SEE THE PRODUCT MATERIAL SAFETY DATA SHEET (MSDS) AND LABEL WARNINGS FOR ADDITIONAL SAFETY INFORMATION.

#### \*Activated Material

<sup>†</sup>Immediately after mixing, pour the entire material on the marked-out section of floor in a long, thin stripe. Do not work out of a pan or container, as the build-up of heat could shorten the pot life and create a hazardous condition.

Calculated values are shown and may vary slightly from the actual manufactured material.

The technical data and suggestions for use contained herein are correct to the best of our knowledge, and offered in good faith. The statements of this literature do not constitute a warranty, express, or implied, as to the performance of these products. As conditions and use of our materials are beyond our control, we can guarantee these products only to conform to our standards of quality, and our liability, if any, will be limited to replacement of defective materials. All technical information is subject to change without notice.



Rust-Oleum Corporation 11 Hawthorn Parkway Vernon Hills, Illinois 60061 An RPM Company

Phone: 877•385•8155 www.rustoleum.com/industrial Form: 2053990 Rev.: 051911