



REMR MATERIAL DATA SHEET CM-SE-1.18

CONCRETE SEALER: STOP SPALL

1. NAME

Stop Spall

1/8 to 3/8 in. into the top layer of both old and new concrete. This in-depth protection cannot be worn off or ruptured. The elastomeric modification of Stop Spall provides a coefficient of expansion that is compatible with the concrete. The epoxy base of this compound fills the available void system in the top layer of concrete and adds strength, wear resistance, and chemical resistance. It is resistant to the attack of salt, urea, calcium chloride, gas, oils, and solvents.

2. MANUFACTURER

Commercial Chemical Company
1021 Summer St.
Cincinnati, OH 45204
Telephone: 513-921-8600

Stop Spall effectively seals the top layer of concrete, but permits the concrete aggregate to breathe. It prevents moisture entrapment in the concrete.

3. DESCRIPTION

Stop Spall is a two-component elastomeric, epoxy polysulfide penetrating concrete sealing compound.

Limitations: Surfaces to be treated must be at least 50° F, clean, dry, and sound; adequate ventilation must be provided.

4. USES & LIMITATIONS

Uses: Stop Spall retards the deterioration of concrete surfaces caused by cycles of freezing and thawing and deicing chemicals. It penetrates from

5. MANUFACTURER'S TECHNICAL DATA

Packaging: 10- and 110-gal kit

Technical data:

The epoxy component consists of an epoxy base resin and suitable solvents. The epoxy resin base meets the following requirements:

| Properties | Requirements | |
|----------------------------------|--------------|-----|
| | Min | Max |
| Epoxide equivalent | 175 | 225 |
| Viscosity, at 25° C, centipoises | 5 | 10 |
| Color, 25° C | -- | 5 |
| Weight per gallon, 1b, 20° C | 9.0 | 9.7 |
| Flash point, Tag Closed Cup, ° F | 150 | -- |

| | | |
|----------------------------|-----|-----|
| Molecular weight avg. (IR) | 325 | 380 |
| Equivalent weight | 175 | 225 |
| Reactive diluent, percent | 9 | 15 |

The polyamide-modified curing component consists of a liquid polyamide polymer, room temperature curing, necessary solvents, and curing agents. The polyamide base meets the following requirements:

| Properties | Requirements | |
|--|--------------|-----|
| | Min | Max |
| Color, Hellige | 9 | 12 |
| Water, percent | -- | 0.1 |
| Weight per gallon, lb, 25° C | 7.5 | 8 |
| Viscosity, at 77° F, centipoises, Brookfield | 400 | 700 |
| Flash point, ° F | 200 | -- |
| Specific gravity | 0.95 | 1.0 |

This sealant, when mixed, will contain 26-percent ± 1-percent epoxy polysulfide vehicle solids.

The working or pot life of the mixed material is not less than 4 hr at 72° F. It shall remain sprayable or applicable and retain full penetration qualities for the duration of the pot life.

Viscosity is not less than 9 nor more than 25 sec when measured with a No. 4 Ford Cup at 75° F.

Warranty: The manufacturer warrants that material supplied is in accordance with manufacturer's specifications and ASTM requirements. A joint guarantee or warranty of the installed system by the manufacturer and applicator may be provided.

6. MANUFACTURER'S GUIDANCE FOR APPLICATION

Surface preparation: Concrete must be dry and clean. It should be free from paint, heavy grease and oil, laitance, incompatible curing compounds, and contaminants prior to application. This may be done by acid cleaning, sandblasting, scarifying, detergent cleaning, grinding, or high-pressure water blasting as applicable. New

concrete should be placed using compatible curing compounds, or should be wet cured. Unless contaminated, new concrete will then not require further surface preparation. New concrete should not be sealed until it has been cured for 28 days.

Application: Stop Spall is to be applied at a uniform measured rate of application by calibrated tank spray truck for all major areas of work. Hand spraying will be permitted only for touch-up, edge work where required, and areas inaccessible to spray truck. All hand spraying should conform in appearance to measured rate areas.

Safety requirements: Stop Spall is harmful or fatal if swallowed. Do not induce vomiting. Avoid prolonged contact with skin or breathing of vapor. Do not store above 90° F. Do not incinerate. Close container after using. Flammable. Do not use near fire or flame. Use with adequate ventilation. Keep out of reach of children.

After the surface has been wet, a minimum of 1 day of warm temperature (72° F or above) should be allowed before application. Surface temperature shall exceed 50° F. Surface temperatures of 72° F or higher are

desirable. Morning dew shall be allowed to evaporate from concrete prior to application.

Coverage: The rate of application for new concrete shall be 80 to 100 sq ft/gal.

Extremely porous surfaces, old, weathered concrete, or extremely textured concrete may require a higher rate of application.

7. CORPS OF ENGINEERS' EVALUATION

Physical and mechanical properties:

Percent solid
(ASTM D 1644, Method A): 22.3%

Percent water absorption (ambient temperature) (ASTM C 642):

| | |
|--------|-------|
| 1 day | 4.10% |
| 2 days | 4.14% |
| 4 days | 4.20% |
| 7 days | 4.24% |

Ratio of percent water absorption for treated to nontreated specimen (2-day submersion): 88.1%

8. ENVIRONMENTAL CONSIDERATIONS

Reasonable caution should guide the preparation, repair, and cleanup phases of sealant activities involving potentially hazardous and toxic chemical substances. Manufacturer's recommendations to protect occupational health and environmental quality should be carefully followed. Material safety data sheets should be obtained from the manufacturers of such materials. In cases where the effects of a chemical substance on occupational health or environmental quality are unknown, chemical substances should be treated as potentially hazardous toxic materials.

9. AVAILABILITY & COST

Availability: Stop Spall penetrating epoxy sealer is available throughout the United States and overseas.

Cost: The applied cost of Stop Spall will vary with project conditions and regional considerations. Costs per square foot including materials and labor for a typical parking ramp are from 20¢ to 40¢/sq ft.

10. TECHNICAL SERVICES

Call collect: 513-921-8600. Request deck-sealing specialist. History and references are available.