

PRODUCT DESCRIPTION

THERMO-SORB is a single component, subliming/intumescent, acrylic, thin film, fire resistive coating, which is spray applied directly to primed steel surfaces. **THERMO-SORB** provides a durable, tough, aesthetically pleasing finish that allows the shape of the steel to be maintained while providing the specified level of fire resistance.

BASIC USE

THERMO-SORB is applied to structural columns and beams to provide fire ratings for 1, 2 and 3 hour protection based on UL 263 (ASTM E 119 and NFPA 251).

TESTING / CERTIFICATION / RECOGNITION

Underwriters Laboratories, Inc. (UL)
Tested to UL 263 and ASTM E 84

APPLICATION CONDITIONS

Air and substrate temperature:
above 41°F (5°C) and rising
5°F (3°C) above dew point
Humidity: not greater than 85%
(Provide heat and/or dehumidification if needed.)

PACKAGING / SHIPPING

5 Gallon (US) containers
55 Gallon (US) drums

STORAGE CONDITIONS

Store off ground, above 32°F (0°C), below 100°F (38°C) and out of direct sunlight.

Prior to spraying, temperature of **THERMO-SORB** must be a minimum of 70°F (21°C).

Refer to application instruction and terms and conditions for more details.

PHYSICAL DATA

Theoretical Spread Rate 1,138 Ft²/gal
(Measured per ASTM D2697) (@ 1 mil DFT)

Net weight per gallon (lbs) 10.58 ± 5%

Drying Time @ 77°F (25°C) and 50% R.H.

Touch: 30 minutes
Recoat: 4 hours

Topcoat

THERMO-SORB must have a minimum Shore A hardness of 70 prior to topcoating.

Color Light Gray

Finish Flat

Consistency Thick Paint

V.O.C. (EPA Method 24)

As supplied 2.87 lbs/gal (344 g/l)

Thinned:

Plasite Thinner #19: 9.8 lb/gal (357g/l)
3.2 oz/gal w/ Toluene: 9.8 lb/gal (357 g/l)
3.2 oz/gal w/ Thinner #242E: 2.87 lb/gal (344g/l)
(These are nominal values.)

Flash Point 23° F (-5°C)

Shelf Life 18 Months

APPLICATION SUMMARY

1. Blast steel surface to SSPC-SP6 (Sa2)
2. Apply approved primer
3. Apply **THERMO-SORB** to specified thickness
4. Apply approved topcoat (as required)
(Refer to approved topcoat list for use over **THERMO-SORB**)

Note: 3 hour rated hollow sections require High Temp Mesh.

July 2007

THERMO-SORB®

Refer to application instructions for more details.

AIRLESS SPRAY EQUIPMENT

Minimum equipment required to apply THERMO-SORB includes:

Spray Equipment:

Must use a minimum 1.0 GPM airless pump (i.e.: Graco 1095 or larger)
Install 30 mesh inline filter
Remove rock catcher from siphon tube
(Note for air driven pumps: compressor must be large enough to run pump and deliver consistent air supply)

Spray Gun:

Graco Contractor Gun (filters must be removed)
Graco Silver Gun (or equivalent)
(Note: all guns must have a non diffuser seat-housing)

Spray Tips: Graco Heavy Duty RAC (Gray Key non-diffuser, non-cateye type)

Size: 0.025" minimum
revers-a-clean or equal
Fan Pattern: 4" to 10"

Hoses:

Delivery: 3/8" ID minimum (solvent resistant)
Whip: 1/4" ID minimum (solvent resistant) (optional)

THINNERS

Toluene: Maximum 16oz. per 5 gallons or
Thinner #242E: Maximum 16 oz. per 5 gallons

CLEAN UP

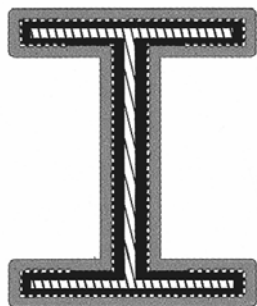
Pump, Gun, Tips and Hoses: Thinner #242E, Thinner #2, Toluene, MEK, MIBK, Xylene

SAFETY PRECAUTIONS

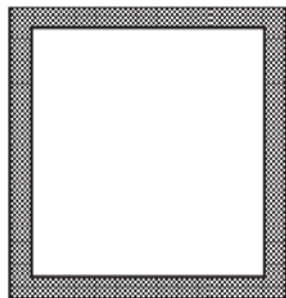
This product must be installed by trained and certified applicators in accordance with the advice given on this sheet, application manual (latest edition) and Material Safety Data Sheet (MSDS). All work involving application and use of this product should be performed in compliance with all relevant national and local health, safety and environmental standards and regulations. In the event welding or flame cutting is performed on metal coated with this product, dust and fumes will be emitted which will require the use of appropriate personal protective equipment and adequate exhaust ventilation.

DISCLAIMER

The technical data contained in this data sheet is accurate to the best of our knowledge. No warranty is expressed or implied. For specific warranty information, refer to terms and conditions, a copy of which can be obtained upon request.



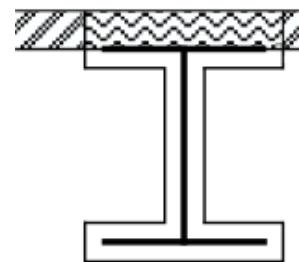
Structural I Section Column
UL X660



Rectangular Hollow Section
UL X661



Circular Hollow Section
UL X662



Structural Beam
UL N619

July 2007

To the best of our knowledge the technical data contained herein is true and accurate on the date of publication and is subject to change without prior notice. User must contact Carboline Company to verify correctness before specifying or ordering. No guarantee of accuracy is given or implied. We guarantee our products to conform to Carboline quality control. We assume no responsibility for coverage, performance or injuries resulting from use. Liability, if any, is limited to replacement of products. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY CARBOLINE, EXPRESS OR IMPLIED, STATUTORY, BY OPERATION OF LAW, OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Carboline®, THERMO-SORB® and THERMO-LAG® are registered trademarks of Carboline Company.