



**REMR MATERIAL DATA SHEET CM-SE-1.32**  
**CONCRETE SEALER: HEY'D1 SILOXAN**  
 (Supersedes previously issued CM-SE-1.32)

1. NAME

HEY'D1 Siloxan

not be applied to coated or painted surfaces.

2. MANUFACTURER

Tamms Industries Co.  
 1222 Ardmore Avenue  
 Itasca, IL 60143  
 Telephone: (708) 773-2350

5. MANUFACTURER'S TECHNICAL DATA

Specific gravity 25 °C.... 0.79 g/cm<sup>3</sup>  
 Shelf life..... 72 months  
 Flash point, °F..... 93

3. DESCRIPTION

HEY'D1 Siloxan is a penetrating sealer used for damp-proofing masonry and concrete structures. The sealer contains an oligomeric alkyl siloxane in mineral spirits. The sealer can be obtained as a 6-percent solid siloxane for damp-proofing vertical surfaces and as a 16-percent solid siloxane for damp-proofing horizontal surfaces.

Average weight gain in 15-percent sodium chloride solution after 21 days soaking compared to uncoated cubes.

*Siloxan	0.27
Uncoated concrete	1.93

Chloride ion content of soaked concrete cubes

Percent by Weight of Concrete  
 Dept Interval (in.)

0-½ in.    ½-1 in.    1-1½ in.

*Siloxan	0.055	0.009	0.009
Uncoated concrete	0.473	0.146	0.032

\* 16-percent solid

4. USES & LIMITATIONS

Uses: HEY'D1 Siloxan is used for damp-proofing concrete and masonry structures and for slowing down the penetration of salts into concrete. HEY'D1 Siloxan penetrates deeply into the masonry or concrete surface. It dries tack-free and is therefore not susceptible to picking up dirt. It quickly becomes water repellent and is, therefore, resistant to wind-driven rains. It can be applied to slightly damp surfaces and causes no discoloration on most surfaces.

Limitations: HEY'D1 Siloxan cannot be used for nonabsorbent materials such as glazed bricks or tile. It should

6. MANUFACTURER'S GUIDANCE FOR APPLICATION

HEY'D1 Siloxan is supplied ready to use and can be applied by brushing, rolling, or spraying. The best method of application is to use a low pressure spray directly onto the surface in a flooding action. The sealer can be applied in one or two coats

(depending on absorbency of substrate). Exact coverage is dependent on the porosity of the surface but is normally approximately 125 sq ft/gal. The surface may be slightly damp, but the dryer the surface, the better the penetration.

7. CORPS OF ENGINEER'S EVALUATION

Percent solid (ASTM D 1644, Method A):

HEY'D1 Siloxan 6%: 7.3  
 HEY'D1 Siloxan 16%: 14.6

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

	HEY'D1 Siloxan 6%	HEY'D1 Siloxan 16%
1 day	0.24%	0.16%
2 days	0.35%	0.22%
4 days	0.53%	0.37%
7 days	0.70%	0.51%

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

HEY'D1 Siloxan 6%: 7.4%  
 HEY'D1 Siloxan 16%: 4.7%

Percent water transmission

	HEY'D1 Siloxan 6%	HEY'D1 Siloxan 16%
2 days	1.12%	0.82%
4 days	1.90%	1.28%
7 days	2.49%	2.15%

Ratio of percent water transmission  
for treated to nontreated specimen  
 (7-day diffusion)

HEY'D1 Siloxan 6%: 70.5%  
 HEY'D1 Siloxan 16%: 60.9%

Scaling resistance of coated-concrete surface (ASTM C 672)

Rating after 50 cycles of freezing and thawing

Weight Loss, g	Control
HEY'D1 Siloxane 16%	
0.0	34.9

No scaling observed

Accelerated weathering test of coated \*3- by 6-in. mortar prisms (ASTM G 53)

Water Absorption 48 hr, %

Before Test	After 1,600 hr testing
0.55	0.65

Condition after Test: No change

\*HEY'D1 Siloxan 16%

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

Information concerning the availability and cost of HEY'D1 Siloxan can be obtained by writing the manufacturer at the address given in item 2 or calling (804) 468-2200.

10. TECHNICAL SERVICE

Information on technical service can be obtained by writing the manufacturer at the address in item 2 or by calling (708) 773-2350.