



REMR MATERIAL DATA SHEET CM-SE-1.55

CONCRETE SEALER: URETHABOND 111

1. NAME
UrethaBond 111
2. MANUFACTURER
Coatings for Industry, Inc.
319 Township Line Road
Souderton, PA 18964
Telephone: 215-723-0919
3. DESCRIPTION
UrethaBond 111 is a light, stable, two-component aliphatic polyurethane finish.
4. USES
This sealer is suggested for use in areas where resistance to severe chemical environment or abrasion resistance is needed or where graffiti is a problem. It has been used with chemical storage tanks, tank trucks, rail cars and ships, steel mills, refineries, public transportation vehicles, etc. and can be used on all steel and concrete surfaces after appropriate priming.
5. MANUFACTURER'S TECHNICAL DATA
Suggested no. of coats: 2
Dry film thickness: 2 mils min
Theoretical coverage @ 2.0 mils dry film: 480 sq ft/gal
- Drying time:*
To touch 1 hr
Between coats 6 hr min
Max hardness 7 days
Antigraffiti properties 24 hr min
- Temperature limitations
continuous dry: 250 °F
- Pot life 4 hr min
- Fire resistance of dry film Self-extinguishing
- Packaging: 1-gal and 5-gal units
- Thinner: CFI-711 Thinner
- Metal primer: UrethaBond 104
- Note: Although this coating composition is not a fire retardant product, it will not support combustion and will self-extinguish when the source of fire is removed.
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- * Dependent upon temperature and humidity.
6. MANUFACTURER'S GUIDANCE FOR APPLICATION
Surface preparation: New metal surfaces should be cleaned of oil, grease and dirt. To obtain optimum results, the metal should be sandblasted and UrethaBond 104 primer applied then topcoated with Urethabond 111. If metal surface is rusted and

sandblasting is not practical from application or cost standpoint, UrethaBond 104 can be applied directly over rust that is tightly adherent. Although this situation is not as ideal as sandblasting, excellent results have been obtained (See manufacturer's Bulletin 100). When painting over previously painted surfaces make a spot test to check for lifting. Remove dirt and loose paint by suitable method and spot prime before application of finish coat. It is extremely important that surface is free of all moisture prior to coating application, or blistering of paint film may occur.

Application: This coating can be applied immediately after mixing the two components. However, thorough mixing of the two components is important. Mechanical mixing is preferred at slow speed to avoid air entrapment. This coating may be applied by spray (air or airless), brush or roller (close nap).

Caution: Part B contains aliphatic polyisocyanate prepolymer when combined with Part A. Warning applies to complete mixture. Use adequate ventilation. In confined areas, use adequate forced ventilation during application and drying. When spraying, wear suitable protective vapor/particulate respirator such as #8711 manufactured by 3M Co. In areas where there is a minimum of air movement, wear a fresh air mask such as #W-292 manufactured by 3M Co. Urethabond is harmful or fatal if swallowed. If swallowed, do not induce vomiting. Call physician immediately. In case of contact with eyes, flush repeatedly with water and contact physician. It is also combustible. Keep away from heat, sparks and open flame. Wear gloves as this product is difficult to remove from skin.

7. CORPS OF ENGINEERS' EVALUATION (tested as concrete sealers only)

Physical and mechanical properties:

Percent solid
(ASTM D 1644, Method A): 75.9%

Percent moisture absorption
(ambient temp) (ASTM C 642-82):

| | |
|--------|-------|
| 1 day | 0.02% |
| 2 days | 0.03% |
| 4 days | 0.03% |
| 7 days | 0.04% |

Ratio of percent moisture absorption
for treated to nontreated specimen
(2-day submersion): 0.64%

Percent vapor transmittance (see REMR
Technical Note CS-ES-1.8):

| | |
|--------|-------|
| 2 days | 0.06% |
| 4 days | 0.12% |
| 7 days | 0.21% |

Ratio of percent vapor transmittance
for treated to nontreated specimen
(2-day diffusion): 3.75%

8. ENVIRONMENTAL CONSIDERATIONS

Reasonable caution should guide the preparation, repair, and cleanup phases of 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 must 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.