TAMMS INDUSTRIES



## **TECHNICAL DATA SHEET**

## **DURAL 333**

## **Epoxy Penetrating Sealer**

- DESCRIPTION: DURAL 333 is a solvent-based epoxy penetrating sealer for concrete and masonry surfaces. It fills the surface porosity thereby lowering absorption of water and salts. The epoxy binds the concrete surface improving the wear resistance and reducing dusting.
- 2. USES: DURAL 333 is used as a sealer to protect concrete highways, bridge decks, aircraft hanger floors, machine shop floors, parking garage decks and other areas requiring increased wear and water resistance. DURAL 333 can also be used to revitalize old floors and reduce dusting of concrete surfaces.
- 3. **COMPOSITION & MATERIAL:** DURAL 333 is a two part solvent based epoxy sealer.

## **MATERIAL PROPERTIES @ 75°F (25°C)**

 $\begin{array}{ll} \mbox{Mixing Ratio (A:B) by volume} & 1:1 \\ \mbox{Pot life, hrs.} & 5-8 \\ \mbox{V.O.C.} & 345 \ \mbox{g/l} \end{array}$ 

Values presented are typical laboratory data.

- 4. **COMPLIANCE:** DURAL 333 will match the performance of Epoxy Sample 16E of the NCHRP Report 244. DURAL 333 complies with performance requirements of Ohio Department of Transportation specification for sealers (864.02) when applied at 205 square feet/gallon. DURAL 333 complies with national AIM VOC regulations in the primer/undercoater category (<350 g/l).
- 5. SURFACE PREPARATION: Concrete must be structurally sound, clean, dry and free of laitance, dust, dirt, oil, coatings, form release agents and other contaminants. The preferred method of surface preparation is abrasive blasting. Remove defective concrete, honeycombs, cavities, joint crack voids and other defects by routing to sound material. Rebuild areas with suitable patching materials. Smooth, pre-cast and formed concrete surfaces must be cleaned, roughened and made absorptive by abrasive blasting or shot blasting. Blow debris and residue out of cracks and from the surface with a moisture-free and oil-free air jet. Mask expansion joint sealants to prevent adhesion of DURAL 333 to the joint surface. Surfaces and cracks must be completely dry before DURAL 333 application to obtain penetration. For further information contact Tamms Technical Service Centers.

- 6. **MIXING INSTRUCTIONS:** Mix equal volumes of Component A and Component B thoroughly with a slow speed motor and mixing blade. A 1/2" drill and Jiffy mixer is acceptable. Do not thin.
- 7. **APPLICATION TECHNIQUES:** The sealer should be applied only to a dry slab and after new concrete has cured for 28 days. For outdoor application at least two days of dry weather are recommended prior to application. The sealer can be applied by power spray, brush, short nap roller or a squeegee. When sealing floor slabs, the porous sections will dry quickly and can re-coated immediately until sufficient film is seen on the surface. All re-coats should be done before DURAL 333 becomes tack free. Ideal application temperature for the sealer application is between 50°F and 90°F. On new concrete surfaces which have a steel trowel finish, a test patch to determine porosity and coverage rates is highly recommended.
- 8. **COVERAGE:** Coverage rates are approximate and for estimating purposes only. Surface temperature, texture and porosity will determine actual material requirements.

<u>Concrete Surface</u>
Dense Porous
DURAL 333, sq. ft./gal 200-300 175-250

- 9. **CAUTIONS:** Do not mix or apply DURAL 333 at temperatures below 50°F or when rain is expected within 12 hours after application. Heavy application on dense surfaces will cause longer dry times and soft films. Apply only to dry concrete and to concrete which has cured for at least 28 days. For outdoor application allow at least two days of dry weather prior to application. Sealer is **FLAMMABLE**, keep away from flames and provide proper protection during application.
- 10. **CLEAN UP:** Clean tools and equipment immediately following use with Xylene or Aromatic 100. Clean drips and over spray while still wet with the same solvent. Dried DURAL 333 will require mechanical abrasion for removal.
- 11. **PACKAGING & STORAGE:** DURAL 333 is available in 4 gallon cases, 10 and 100 gallon units. Store at between 50° and 90°F. Protect from moisture. Shelf life is 2 years in unopened containers and in protected storage. The freight class is 60.

- 12. ENVIRONMENTAL AND SAFETY PRECAUTIONS: Component A contains epoxy resin and solvents. FLAMMABLE. Vapors can cause respiratory irritation. Contact may cause skin or eye irritation. Can cause sensitization after prolonged or repeated exposure. Use safety goggles and chemical resistant gloves. Use only with adequate ventilation. Component B is corrosive, contains amines and solvents. FLAMMABLE. Contact with eyes and skin may cause severe burns. Can cause sensitization after prolonged or repeated use. Use of safety goggles and chemical resistant gloves is highly recommended. Use only with adequate ventilation.
  - **First Aid:** In case of skin contact, wash immediately and thoroughly with soap and water. For eye contact, flush immediately with water for 15 minutes and consult a physician immediately. For respiratory problems, remove person immediately to fresh air.

**Disposal:** Collect with absorbent material. Dispose of in accordance with current local, state and federal regulations.

READ MATERIAL SAFETY DATA SHEET BEFORE USING. MATERIAL IS FOR INDUSTRIAL USE ONLY. KEEP AWAY FROM CHILDREN. EMERGENCY RESPONSE PHONE NUMBERS ARE (800) 862-2667 TAMMS OR (800) 424-9300 CHEMTREC.

13. **TECHNICAL SERVICE:** For application procedures, surface conditions or other questions not answered please contact:

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