

DURAL[®] 304

INDUSTRIAL MAINTENANCE COATING

DESCRIPTION

DURAL 304 is a two component solvent based high solids epoxy coating which provides good chemical resistance and excellent wear resistance. DURAL 304 should be used as a coating for concrete and steel where both aesthetics and performance are desired. DURAL 304 can be used on walls and floors and will withstand foot and rubber tired vehicular traffic.

PRIMARY APPLICATIONS

- Interior/exterior surfaces
- Walls and floors in manufacturing plants
- Warehouses and production assembly areas
- Truck/auto repair bays
- USDA compliant
- Steel or concrete tanks
- Walls in sewage treatment plants
- Breweries
- Poultry processing areas
- Locker and clean rooms

TECHNICAL INFORMATION

Material Properties @75°F (24°C) 50% RH

| | |
|--|--------------|
| Mix ratio (A:B) volume | 1 to 1 |
| VOC Content | 340 g/l |
| Viscosity, mixed cps | 5000 to 8000 |
| Mixed solids % by wt | 65 |
| Pot life (2 gal (7.57 L) unit) | 4 to 6hours |
| Pencil Hardness | 2H |
| Tack Free Time..... | 2 to 4 hours |
| Final cure..... | 7 days |
| Flexibility 1/8" (3.2 mm) Mandrel..... | passes |

Values presented are typical and not necessarily referenced to create specifications.

Appearance: Light Gray, Dark Gray, Tile Red, and unpigmented (amber). Special or custom colors are available subject to minimum quantity orders.

Chemical Resistance Chart

| ACIDS | RATING | ALKALIES/SALTS | RATING |
|--------------------------------|--------|-------------------------|--------|
| Acetic Acid 5% | 1 | Ammonia 29% | 3 |
| Citric Acid 5% | 2 | Potassium Hydroxide 50% | 3 |
| Hydrochloric 10% | 2 | Sodium Hydroxide 50% | 3 |
| Nitric Acid 5% | 2 | Detergent Solution | 3 |
| Phosphoric 20% | 2 | Ammonium Sulfate 50% | 3 |
| Sulfuric 10% | 2 | Sodium Chloride 50% | 3 |
| SOLVENTS | | Ferric Chloride 50% | 2D |
| Ethyl Alcohol 95% ¹ | | Sodium Hypochlorite 5% | 2D |
| Ethyl Acetate | NR | MISCELLANEOUS | |
| Methanol | 1 | Brake Fluid | 2 |
| Methyl Ethyl Ketone | NR | Skydrol | 2 |
| Mineral Spirits | 3 | Ethylene Glycol | 3 |
| Methylene Chloride | NR | Propylene Glycol | 3 |
| Toluene | 2 | Vegetable Oil | 3 |
| Xylene | 2 | Gasoline | 3 |
| Trichlorethane | 2 | Urine | 3 |
| Isopropyl Alcohol | 1 | Bleach Solution | 3 |
| | | Diesel Oil | 3 |

1 = Incidental Contact (8 hrs)
 2 = Splash & Spill (72 hrs)
 3 = Extended Exposure (7 days)
 D = Discoloration may occur
 NR = Not Resistant
 Dry film thickness @ 3.0 mils (2 coats @ 1.5 mils each)
 Primer thickness not included

PACKAGING

DURAL 304 is packaged in 10 gal (37.85 L) units and 4 gal (15.56 L) cases.

SHELF LIFE

2 years in original, unopened package.

COVERAGE

| | ft ² /gal (m ² /L) |
|-----------|--|
| DURAL 304 | 200 to 300 (4.91 to 7.36) |
| 2nd coat | 250 to 400 (6.14 to 9.82) |

Note: Coverage rates are approximate and for estimating purposes only. Surface porosity, texture and temperatures will determine actual material requirements.

DIRECTIONS FOR USE

Surface Preparation Concrete: Concrete must be structurally sound, dry, free of grease, oils, coatings, dust, curing compounds and other contaminants. Surface laitance must be removed. The preferred method of surface preparation is abrasive blasting or shotblasting. For oil contaminated surfaces using steam cleaning in conjunction with a strong emulsifying detergent may be considered.



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An **RPM** Company



Rinse thoroughly with potable water. After cleaning, remove defective concrete, honeycombs, cavities, joint cracks, voids and other defects by routing to sound material. Smooth, precast and formed concrete surfaces must be cleaned, roughened and made absorptive by abrasive blasting or shotblasting. If it is not possible to abrasiveblast or shotblast, acid etch with a 15% Hydrochloric acid solution. After etching, pressure wash or flush the surface with copious amounts of water to neutralize the surface. Care must be taken to ensure that all salts and residue from the reaction have been removed. The pH of the surface should be checked per ASTM D 4262 following acid etching. To confirm that the surface preparation is adequate, there must be concrete failure in the surface when tested with an Elcometer or similar pull tester (ASTM D 4541). Before application of the coating, use the "Visqueen test" (ASTM D 4263) to evaluate moisture level in concrete. **New Concrete:** Should be allowed to cure for a minimum of 28 days. (Consult your local Euclid Chemical representative if earlier times are required.). Remove any surface hardener or curing compounds, by using the recommended mechanical methods for surface preparation. Prepare surface as recommended above. **Old Concrete:** For quick, small patching use suitable epoxy mortar. For larger areas use cementitious patching materials which are compatible with the system. After patching, a light brush blast is recommended prior to coating. **Steel:** All oils, greases, dirt, old coating or chemical contaminants must be removed. All welds should be continuous and ground to remove all splatter, sharp edges, laps and other surface irregularities. For Intermittent Contact/ Atmospheric Service, all steel surfaces should be blasted to a "NEAR WHITE" metal finish using clean dry blasting media.

Mixing: Premix the individual components Part A and Part B separately. Combine equal parts by volume of Part A (Base) and Part B (Hardener) in a clean container. Mix thoroughly with a slow speed motor using a "Jiffy" mixer for a minimum of 3 minutes. Scrape the sides and bottom of the container during mixing. Do not aerate mix. Do not thin mix. Allow mix to age (induct) for 30 to 40 minutes at 75°F (24°C) and remix before applying material.

Application: The ambient and surface temperature should be between 50°F (10°C) to 90°F (32°C). DURAL 304 can be applied using a short nap roller, brush, or an airless spray. DURAL 304 dries quickly, hence roll out brush marks or sags soon after application. If an anti-skid surface is required broadcast a fine, clean, dry silica aggregate at a rate of 0.2 to 0.8 lbs/yd² (.10 to .43 kg/m²) within the tack free time of DURAL 304 to achieve the desired surface. A second coat or a seal coat should be applied within 24 hours, at 75°F (24°C) . Allow the coating to cure 48 hours (at 75°F) (24°C) prior to opening to light traffic.

CLEAN-UP

Clean tools and application equipment immediately after use with Methyl Ethyl Ketone or PM Acetate. Clean spill or drips while still wet with solvents. Dried DURAL 1004C will require mechanical abrasion for removal.

PRECAUTIONS/LIMITATIONS

- Keep away from heat and flame.
- Store at temperatures between 50°F to 90°F (10°C to 32°C).
- Protect from moisture.
- Apply DURAL 304 when surface and ambient temperatures are between 50°F to 90°F (10°C to 32°C) and the humidity below 90%.
- Excessively high film thicknesses and/or moisture may cause soft films and surface blistering.
- Concrete surfaces may darken to give a "wet look" effect on application.
- A test patch for application on concrete or existing coatings is highly recommended.
- Not intended for continuous immersion.
- Provide adequate ventilation and ensure proper protective and safety equipment during application.
- Keep away from sparks, open flame, pilot lights and other sources of ignition.
- Keep containers tightly closed.
- In all cases, consult the Material Safety Data Sheet before use.

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