

# Mer-Thane 300C Topcoat

## Aliphatic Polyester Polyurethane Topcoat

# Product Data Sheet

### PRODUCT DESCRIPTION

Mer-Thane 300C Topcoat is a two-component, liquid-applied, aliphatic, polyester, polyurethane clear topcoat designed for application over urethane and portland cement based materials in moderate to severe chemical environments.

Common application areas include:

- Pedestrian & vehicular traffic decks
- Steel structures & bridges
- Storage tanks
- Industrial processing environments
- Petrochemical processing
- Manufacturing & warehouse areas

### CHARACTERISTICS

- Excellent weatherability
- Chemical resistant
- Seamless
- Color stable
- High gloss
- UV resistant with exceptional gloss retention
- Durable pedestrian or vehicular traffic coating
- Abrasion & impact resistant

### CAUTIONS & LIMITATIONS

- The substrate surface must be structurally sound, clean, dry and free of dirt, dust, oil, grease, paint or other contaminants at the time of material application.
- Do not install during damp weather or when precipitation is occurring or expected within 24 hours.
- Application in direct sunlight during high temperatures may adversely affect aesthetics.
- Not designed for heavy steel wheeled traffic.
- Not suitable for applications where chained or studded tires may be used.
- Not suitable for below-grade, split slab, or slab-on-grade without on-grade vapor barrier.
- Not for use on sandwich slabs without a vapor barrier or with insulation, slabs over unvented metal pans, suspended pool decks, swimming pools, magnesite, lightweight concrete, asphalt surfaces or asphalt overlays.
- Containers that have been opened should be used within 48 hours. A polyethylene sheet must be used as a rotoective blanketing prior to re-sealing the lid on a partially used container. Keep the lid tightly sealed when the material is not in use.
- Before using Mer-Thane products, read all container labels, MSDS, application instructions and storage and handling information carefully. Applicators should wear an approved respirator, protective glasses, clothing and gloves. Contains isocyanates. Avoid contact of material with skin or eyes and avoid breathing vapors. Mix and apply materials in well ventilated areas and observe normal safety precautions. Mer-Thane materials are classified as corrosive material and can cause irritation in prolonged exposure. Wash skin thoroughly with soap and water if product(s) contact skin. Consult the Material Safety Data Sheet for additional information and precautions.
- Protect all finished surfaces that are not intended to receive the deck coating system materials.
- Use extra caution in protecting surfaces not to be coated when using spray application methods. Windy conditions or overspray can damage surrounding surfaces.

### TECHNICAL DATA

<b>Coverage Rate</b> .....	5 gallons/1000 ft <sup>2</sup> (at 5 mils)
<b>Pot Life</b> .....	60-75 minutes at 75°F (24°C) RH 50%
<b>DFT per Coat, excluding aggregate</b> .....	5 mils (ASTM C109)
<b>Flash Point</b> .....	Part A 91°F (32.7 °C) Part B 115°F (46°C)
<b>Specific Gravity</b> .....	Part A 1.060 Part B 1.076
<b>Density</b> .....	8.83 lbs/gal 8.96 lbs/gal
<b>Total Solids by Weight</b> .....	71% (ASTM D2369)
<b>Total Solids by Volume</b> .....	69% (ASTM D2697)
<b>VOC</b> .....	2.08 lbs/gallon (250 g/L This product can not (ASTM D2369-81) be used in CA or other low VOC required areas)

### CHEMICAL RESISTANCE

<b>Distilled Water</b> .....	Excellent
<b>Skydrol</b> .....	Excellent
<b>Jet Fuel</b> .....	Excellent
<b>Hydrolic Oil</b> .....	Excellent
<b>Motor Oil</b> .....	Excellent
<b>Unleaded Gasoline</b> .....	Good
<b>Leaded Gasoline</b> .....	Good
<b>Hexanol</b> .....	Fair
<b>Acetone</b> .....	Fair
<b>MEK</b> .....	Fair
<b>MIBK</b> .....	Fair
<b>Butyl Acetate</b> .....	Fair
<b>Toluene</b> .....	Fair
<b>Xylene</b> .....	Fair

- Part A is considered dangerous goods. DOT regulations classify it as paint, Class 3, UN1263, PG III, flammable liquid.
- Surface may be slippery when wet. Broadcast aggregate is recommended to enhance skid resistance.
- Clear coating, may turn opaque and cloudy if moisture penetration conditions exist especially in exterior applications.
- Should not be used in areas with continuous moisture or water contact.
- Primers cannot be used with or between coats of Mer-Thane 300C Topcoat, Clear. The primer will discolor.

### PACKAGING

Mer-Thane 300C Topcoat is available in a 5 gallon kit containing one 5-gallon pail of part A (net fill 2.2 gallons) and one 5-gallon pail of part B (net fill 2.8 gallons).

### COLOR

Mer-Thane 300C Topcoat is available in clear.

**INSTALLATION CONDITIONS**

The Mer-Thane 300C Topcoat should be installed when the surface and ambient temperatures are above 60°F (15.5°C) and below 100°F (37.8°C). Temperature should be at least 5°F above the dewpoint. Do not install during inclement weather, when precipitation is occurring or expected within 24 hours. Mer-Thane 300C Topcoat material is very sensitive to heat and moisture. Higher temperatures and/or high humidity will significantly accelerate the cure time. Use caution in batch sizes and thickness of application. Low temperature and/or low humidity will extend the cure time.

**SUBSTRATE PREPARATION**

The substrate surface must be clean, dry and free of dust and any other contaminants at the time of material application. A minimum finished deck slope of 2% (1/4 unit vertical in 12 units horizontal) is required for proper drainage. Surface imperfections, if left untreated, will be noticeable in the finished application.

**Primer Horizontal Surface**

When necessary apply Mer-Thane 300SC or 300 to the properly prepared surface using a brush or phenolic resin core roller at 1 gallon/300 ft<sup>2</sup> (3.8 L/27.9 m<sup>2</sup>). Primer must be dry and tack free before applying the 300C Topcoat.

**MIXING**

Mer-Thane 300C Topcoat, parts A & B, should be thoroughly mixed individually prior to combining to ensure homogeneous material. Mix the 300C Topcoat parts A & B (1:1.5) using a mechanical mixer at slow speeds. Thoroughly blend the components until a uniform material is obtained. Use care when mixing to avoid air bubbles. Do not mix more than you can apply at one time. Expected pot life of mixed components is 60-75 minutes.

**APPLICATION**

Apply Mer-Thane 300C Topcoat to the properly prepared perimeter deck areas using a 1/4" to 3/8" nap solvent resistant, phenolic core roller. Apply evenly over the entire deck surface at a rate of 0.5 gallon per 100 ft<sup>2</sup> (1.89 L per 9.3 m<sup>2</sup>) (5 mils DFT). Apply with continuous coverage to minimize lines and/or streaking. Use extra care not to entrain air into the material. Allow Mer-Thane 300C Topcoat to cure a minimum of 8 hours and a maximum of 48 hours at 70°F (21°C) RH 50% before proceeding with any additional coats to ensure proper adhesion. Do not allow more than 48 hours to lapse between coats, as a primer can not be used with clear topcoats.

Sloped or pitched surfaces may require additional applications to achieve the desired thickness, back rolling may be required to achieve the desired finish.

Mer-Thane 300C Topcoat will be tack free and dry to touch within 8 hours at 70°F (21°C) RH 50%. Light traffic service can be introduced 24 hours (minimum) after application. Return to full service after 48 hours.

**FIRST AID****EYE CONTACT**

Flush eye with water for at least 15 minutes. Get medical attention promptly.

**INHALATION**

Take person to fresh air. If breathing is difficult, administer oxygen. Get medical attention immediately.

**SKIN CONTACT**

Wipe off contacted area and wash thoroughly with soap and water. If redness, itching, or a burning sensation develops, seek medical attention immediately.

**INGESTION**

Do not induce vomiting. Consult physician immediately.

**FIRE**

Wear self-contained breathing apparatus with full face piece and protective clothing. Use foam, carbon dioxide, dry chemical, and/or halogenated agents.

**SPILL OR LEAK**

Wear skin, eye, and respiratory protection during cleanup. Soak up material with absorbent and shovel into a chemical waste container. Cover container, and remove from work area.

**STORAGE & HANDLING**

Store all Mer-Thane materials in a dry environment at temperatures between 65 to 70°F (18 to 21°C). All materials should be stored in compliance with local fire and safety requirements. Do not store at high temperatures or in direct sunlight. Do not allow uncured materials to freeze. Store materials in tightly closed original containers, off the ground, on plywood or non-asphaltic insulation board. Avoid moisture contamination. Always wear proper safety equipment, including an approved respirator, eye protection and gloves when mixing and/or applying these products. Do not breathe vapors. Do not keep opened containers in confined spaces. Part A is considered dangerous goods. DOT regulations classify it as paint, Class 3, UN1263, PG III, flammable liquid. The material is combustible; the combustion products may be hazardous. Do not expose this material to open flames, spark or other sources of ignition. Use proper grounding and bonding procedures during liquid transfer as described in National Fire Protection Association document NFPA77. Consult published OSHA (Occupational Safety and Health Administration) regulations for additional information and compliance information.

**SHELF LIFE**

The shelf life is one (1) year from the date of manufacture in the original, unopened container when the material is properly stored.

**WARRANTY**

Limited manufacturer's defect warranty. Contact Mer-Ko Technical Service Department for specific warranty information or [www.parexmer-ko.com](http://www.parexmer-ko.com)

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