**PRODUCT DATA SHEET**

**SanyMastic – 2000**

**HB Coal Tar Epoxy Coating**

---

**GENERIC TYPE:**
Epoxy-Polyamide Coal Tar

**DESCRIPTION:**
*SanyMastic-2000* is a heavy duty high build coal tar epoxy for protection for steel and concrete in single or two-coat applications in a broad variety of aggressive industrial applications. It meets all requirements of Corp. of Engineers C-200, Federal Specification DOD-P-23236 (SHIPS), and SSPC 16-91.

*SanyMastic-2000* is a two component high performance epoxy-polyamide Coal Tar coating formulated with a convenient 3.5 to 1 mix ratio. *SanyMastic-2000* has been developed as a coating for exposure to severe chemical environments. Easily applied up to at 10 mils (250 microns) in one coat. *SanyMastic-2000* is a self-priming.

**FEATURES:**
- Excellent chemical, corrosion and abrasion resistance
- High-build up to 10 mils (250 microns) in a single coat
- Compatible with controlled cathodic protection
- Meets or exceeds all requirements of:
  - Corp of Engineers C-200, C200a
  - AWWA C-210-92 for exterior
  - SSPC-Paint 16
  - Steel Tank Institute Corrosion Control System STI-P3

**RECOMMENDED USES:**
*SanyMastic-2000* is designed to be applied in relatively high-build films for the protection of steel, concrete and others suitable surfaces of structures exposed to a variety of heavy duty service conditions. Recommended for coating of tanks, piping, sheet piling, pipeline interior and exterior, foundation walls and sumps. Also suitable for concrete and steel surfaces in sewage treatment plants, paper mills and chemical plants. Excellent for below grade surfaces. Also immersion and atmospheric conditions where abrasion and chemical resistance are needed. Industries such sewage and water treatment, chemical processing, marine, offshore exploration, oil and gas distribution, and public utilities all utilize this economical heavy duty product.

**NOT RECOMMENDED FOR:**
Do not use in immersion in Aromatic or Ketone solvents; Strong oxidizing acids.

**SUBSTRATES:**
Apply to properly prepared steel or others as recommended.

---

**SPECIFICATION DATA**

- **Solids Content By Volume:** 78% ± 2%
- **Theoretical Coverage Rate per Gallon:** * 30.6 m²./ Gal. @ 25 microns 3.8 m²./ Gal. @ 205 microns
- **Coverage at recommended Dry Film Thickness per Coat:** 8 mils (250 microns)
- **Flexibility:** Good (chalks)
- **Weathering:** Good (chaulks)
- **Abrasion Resistance:** Very Good
- **Temperature Resistance**
  - Continuous: 200 °F (93 °C)
  - Non-Continuous: 250 °F (121 °C)
- **Color Standard in:** Blank and dark red only
- **Gloss:** High initially, becomes flat
- **Limitations:** Do not use for potable water requirements
- **Pot Life:** 4 hours at 75 °F (24 °C) and less at higher temperatures. Pot life ends when the coatings loses body and begins to sag.
- **Sheel Life:** 24 months when stored at 75 °F (25 °C)
- **Storage Conditions:**
  - Temp.: 45 - 110 °F (7 - 43 °C)
  - Humidity: 0 - 100%

**TOPCOAT REQUIRED:**
None required. *SanyMastic-2000* may be topcoated with *SanyChem KoraTex* Water base Paints as direct. Coal tar bleed-through is likely with most topcoats. Solvent base are not recommended due to discoloration.

**COMPATIBLE COATINGS:**
*SanyMastic-2000* is a self-priming. Can also be applied over catalyzed epoxies or other as recommended. A good acceptable primer for steel is *EpoSany-793*. When an inorganic zinc primer is used, a tie-coat of *EpoSany-793* is recommended. For concrete, epoxy surfacer may be necessary. Consult *SanyChem* Technical Service Department for specific recommendation.

---

**TYPICAL CHEMICAL RESISTANCE**

<table>
<thead>
<tr>
<th>Exposure</th>
<th>Splash &amp; Spillage</th>
<th>Fumes</th>
<th>Immersion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acids</td>
<td>Very Good</td>
<td>Excellent</td>
<td>Very Good</td>
</tr>
<tr>
<td>Alkalies</td>
<td>Very Good</td>
<td>Excellent</td>
<td>Very Good</td>
</tr>
<tr>
<td>Solvents</td>
<td>Good</td>
<td>Very Good</td>
<td>Good</td>
</tr>
<tr>
<td>Salt</td>
<td>Excellent</td>
<td>Excellent</td>
<td>Excellent</td>
</tr>
<tr>
<td>Water</td>
<td>Excellent</td>
<td>Excellent</td>
<td>Excellent</td>
</tr>
</tbody>
</table>
APPLICATION INSTRUCTIONS

These instructions are not intended to show product recommendations for specific service. They are issued as an aid in determining correct surface preparation, mixing instructions, and application procedure. It is assumed that the proper product recommendations have been made. These instructions should be followed closely to obtain the maximum service from the materials.

Substrates & Surface Preparation

**General**
Surfaces must be clean and dry. Employ adequate methods to remove dirt, dust, oil, solvents, and all other contaminants that could interfere with adhesion of the coating.

**Steel**
- Immersion: SSPC-SP10
- Non-Immersion: SSPC-SP6 for maximum protection. SSPC-SP2 or SP3 as minimum requirement.
  - Surface Profile: 2.0-3.0 mils (50-75 micron)

**Concrete**
Concrete must be cured 28 days at 75°F (24°C) and 50% relative humidity or equivalent. Prepare surfaces in accordance with ASTM D4258 for concrete and ASTM D4259 for masonry. Ablating Concrete. Voids in concrete may require surfacing.

**Spray Application Equipment**

This is a high solids coating and may require adjustments in spray techniques. Wet film thickness is easily and quickly achieved. The following spray equipment has been found suitable and is available from manufacturers such as Binks, DeVilbiss and Graco.

**Conventional Spray**: Pressure pot equipped with dual regulators, ½” I.D. minimum material hose, with 50’ maximum material hose. 0.086” I.D. fluid tip and appropriate air cap.

**Airless Spray**: Use ½” minimum I.D. material hose. Hold gun approximately 18-20 inches from the surface and at a right angle to the surface. Use a 0.029” – 0.033” tip with 2400 psi.

- **Pump Ratio**: 30:1
- **GPM Output**: 3.0 (min.)
- **Material Hose**: ½” I.D. (min.)
- **Tip Size**: 0.023-0.035”
- **Output PSI**: 2100-2500
- **Filter Size**: 30 mesh

Teflon packings are recommended and available from the pump manufacturer.

Use a 50% overlap with each pass of the gun. On irregular surfaces, coat the edges first, making an extra pass later. Holiday detection (testing for pinholes or other discontinuities) is recommended, especially for all immersion services.

**Spray**
Use adequate air volume for correct operation. Hold gun 8-10 inches from the surface and at a right angle to the surface.

**Brush & Roller**
Recommended for touch up, striping of weld seams and hard-to-coat areas only. Avoid excessive rebrushing or re-rolling.

**Brush**
Use a medium bristle brush.

**Roller**
Use a short-nap synthetic roller cover with phenolic core.

**Mixing**
Power mix separately, then combine and power mix for a minimum of two minutes. DO NOT MIX PARTIAL KITS.

**Ratio**
- SanyMastic-2000 P/A: 4.5 % Gal. Kit
- SanyMastic-2000 P/B: 3½ Gal. (5 Gal. Can)

**Thinning**
Thin up to 25% by volume with SolvenSan #260. Use of thinners other than those supplied or recommended by SanyChem may adversely affect product performance and void product warranty, whether expressed or implied.

**Application Conditions**

<table>
<thead>
<tr>
<th></th>
<th>Material</th>
<th>Surfaces</th>
<th>Ambient</th>
<th>Humidity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Normal</strong></td>
<td>65 – 85 ºF</td>
<td>60 – 95 ºF</td>
<td>60 – 90 ºF</td>
<td>35 – 70 %</td>
</tr>
<tr>
<td>(18 – 29 ºC)</td>
<td>(16 – 35 ºC)</td>
<td>(16 – 32 ºC)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Minimum</strong></td>
<td>55 ºF</td>
<td>50 ºF</td>
<td>50 ºF</td>
<td>0 %</td>
</tr>
<tr>
<td>(13 ºC)</td>
<td>(10 ºC)</td>
<td>(10 ºC)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Maximum</strong></td>
<td>90 ºF</td>
<td>120 ºF</td>
<td>120 ºF</td>
<td>85 %</td>
</tr>
<tr>
<td>(32 ºC)</td>
<td>(40 ºC)</td>
<td>(49 ºC)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Do not apply when the surface temperature is less than 5 ºF or 3 ºC above the dew point.

Condensation due to substrate temperatures below the dew point can cause flash rusting on prepared steel and interfere with proper adhesion to the substrate. Special application techniques may be required above or below normal application conditions.

**Drying Times**

<table>
<thead>
<tr>
<th>Surface Temp &amp; 50% RH</th>
<th>Between Coats</th>
<th>Final Cure: Immersion Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>60 ºF (16 ºC)</td>
<td>36 hrs</td>
<td>21 Days</td>
</tr>
<tr>
<td>75 ºF (24 ºC)</td>
<td>18 hrs</td>
<td>7 Days</td>
</tr>
<tr>
<td>90 ºF (32 ºC)</td>
<td>8 hrs</td>
<td>3 Days</td>
</tr>
</tbody>
</table>

These times are based on a 8 mil (250 micron) dry film thickness. Higher film thickness, insufficient ventilation, high humidity or cooler temperatures will require longer cure times. Excessive humidity or condensation on the surface during curing can interfere with the cure, can cause discoloration and may result in a surface haze. Any haze or bluish appearance must be removed by water washing before recoating. If the maximum recoat time is exceeded, the surface must be abraded by sweep blasting prior to the application of additional coats.

All recommended thickness between coats. If a final cure is attained and recoat is necessary, wipe with SanySurface AC Cleaner before recoating. If exposed to sunlight for more than 36 hours, wipe with SanySurface AC Cleaner before recoating. Force curing is suggested for all tank linings. Thorough air circulation must be used during and after application until coating is cured. The ventilation system should be capable of preventing the solvent vapor concentration from reaching the lower explosion limit for the solvent used.

**Cleanup & Safety**

**Cleanup** Use SolvenSan #252. In case of spillage, absorb and dispose of in accordance with local applicable regulations.

**Safety** Read and follow all caution statements on this product data sheet and on the SDS for this product. Employ normal workmanlike safety precautions. Hypersensitive persons should wear protective clothing, gloves and use protective cream on face, hands and all exposed areas.

**Caution** This product contains flammable solvents. Keep away from sparks and open flames. All electrical equipment and installations should be made and grounded in accordance with the National Electric Code. In areas where explosion hazards exist, workers should be required to use non-ferrous tools and wear conductive and non-sparking shoes. Prior to use, read container label warnings and the current Material Safety Data Sheet. For important health and safety information. Insure these instructions are practiced during product application and cure.

**FOR INDUSTRIAL USE ONLY. KEEP AWAY FROM CHILDREN. 1/2001**

**Contact**
For information and Prices, Please Call a SANYCHEM Local Sales Representative.

**Phones:** +58-212-6313092 | +58-414-3142752 | Fax: +58-212-6312441

**E-mail** sales@sanychem.com

**Internet** www.sanychem.com

sales@sanychem.com