PRODUCT DATA SHEET

SanyMastic – S600

HB Coal Tar Epoxy Coating

GENERIC TYPE:
Epoxy Coal Tar

DESCRIPTION: ***SanyMastic-S600*** **Coal Tar Epoxy** is a cost efficient alternative to more expensive two component systems. It provides exceptional chemical resistance, excellent adhesion and flexibility and thick film build for added protection. Suitable for immersion service.

SanyMastic-S600 is renowned 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.

FEATURES:
SanyMastic-S600 **Coal Tar Epoxy** is manufactured in a convenient 4:1 ratio, "A" to "B", and can be applied to steel, concrete, timber, or to other construction materials. The cured coating is flexible and affords excellent resistance to impact, thermal shock and abrasion. It cures to a hard, smooth surface, possesses exceptional resistance to immersion in salt water, or in water where an altered pH condition is present. One coat of ***SanyMastic-S600*** will do the work of two or more coats of conventional coal tar epoxies with significant savings of materials and labor costs.

- Excellent chemical, corrosion and abrasion resistance
- High-build up to 24 mils (610 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-S600 is designed to be applied in relatively high-build films for the economical 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. When applied to the interior of potable water pipe, fresh applications of coal tar products may impart an odor or taste in areas of low flow or stagnant water.

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

SPECIFICATION DATA

- **Solids Content By Volume:** 75% ± 2%

- **VOC Values** As supplied: 2.0 lbs/gal (192 g/l)
  Thinned:
  20 oz/gal with **SolvenSany # 260** : 2.6 lbs/gal (307 g/l)
  25 oz/gal with **SolvenSany # 260** : 2.7 lbs/gal (325 g/l)
  These are nominal values.

- **Theoretical Coverage Rate per Gallon: ***
  1184 mil sq. ft.
- **Coverage at recommended Dry Film Thickness (mils):**

Minimum	*Recommended*	*Maximum*
8	16	35
1 Coat	one or two coats	one or two coats

- **Coverage to achieve recommended Thickness (Sq. Ft/Gal.) :**

148	74	34

* Mixing and application losses will vary and must be taken into consideration when estimating job requirements.

- **Temperature Resistance** (Non-Immersion)
  Continuous : 350 °F (177 °C)
  Non-Continuous : 370 °F (190 °C)

  For immersion, temperature depends on exposure, but maximum is 120 °F (49°C)

- **Dry Film Thickness per Coat**
  8 mil (200 microns)

- **Color Standard in** : Blank and dark red only

- **Gloss :** High initially, becomes flat

- **Limitations :** Do not use for potable water requirements

- **Pot Life :** 3 hours at 75 °F (24 °C) and less at higher temperatures. Pot life ends when the coatings loses body and begins to sag.

- **Shelf Life :** 24 months when stored at 75 °F (25 °C)

Storage Conditions: Store indoors.
Temp.: 45 - 110 °F (7 -43 °C)
Humidity: 0 - 100%

TOPCOAT REQUIRED:

None required. ***SanyMastic-S600*** 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-S600 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

Exposure	Splash & Spillage	Immersion
Acids	Very Good	Excellent
Alkalies	Very Good	Excellent
Solvents	Fair- Poor	Good - Fair
Salt	Excellent	Excellent
Water	Excellent	Excellent

January 2001 replaces May 1999

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 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 Surface Cleaning of Concrete and ASTM D4259 Abrading Concrete. Voids in concrete may require surfacing. First coat of **SanyMastic-S600** is thinned up to 33% and applied at a coverage rate of 200-300 sq.ft./Gal.

Galvanized and Non-Ferrous Metals: Degrease and coat with ***SanySurface AC Cleaner***. Brush off blast per SSPC-SP-7 with a 1 mil profile (min.) is also suitable.

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, 3/8" I.D. minimum material hose, with 50' maximum material hose .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:	.023-.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.

Brush & Roller (General) 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

	1 Gal. Kit	05 Gal. Kit
SanyMastic-S600 P/A	0.80 Gal.	4 Gals.
SanyMastic-S600 P/B	0.20 Gal.	1 Gal.

Thinning **Thin** Up to 25% by volume with ***SolvenSany # 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

	Material	Surfaces	Ambient	Humidity
Normal	60 – 85 °F (16 – 29 °C)	60 – 85 °F (16 – 29 °C)	60 – 85 °F (16 – 29 °C)	0 – 80 %
Minimum	50°F (10 °C)	50 °F (10 °C)	50 °F (10 °C)	0 %
Maximum	90 °F (32 °C)	125 °F (52 °C)	110 °F (43 °C)	90 %

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

Surface Temp. & 50% RH	Dry to Touch / Handle	Minimum Recoat Time	Maximum Recoat Time	Immersion
50 °F (10 °C)	6 - 8 hrs	10 hrs	24 hrs	14 days
75 °F (24 °C)	2 hrs	6 hrs	24 hrs	7 days
90 °F (32 °C)	1 hr	3 hrs	24 hrs	5 days

These times are based on a 16.0 mil (400 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 blush 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.

Cleanup & Safety

Cleanup Use **SolvenSany #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 MSDS 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, workmen 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.

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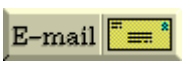

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