

DINJER SG Mastic

(as provided by WBE Dorcas, Inc.)

DESCRIPTION:

2 COMPONENT EPOXY GEL

A two-component, solvent-free, moisture insensitive epoxy system. Specifically designed for the protection of sanitary manholes, wet wells, and valve vaults. Paste-like viscosity recommended for coating of horizontal, vertical, and overhead surfaces. Non-Sag consistency; will not sag at thickness of .25 inch.

TYPICAL USES:

SG Mastic has been formulated primarily to protect the interior and exterior of manholes, lift stations, and valve vaults against the damaging chemicals prevalent in water and sewer treatment environments.

ADVANTAGES

SG Mastic is a 100% solids, low odor amine cured modified epoxy. It is unaffected by the presence of moisture during cure. It has outstanding resistance to most organic and inorganic acids, and provides excellent adhesion to most substrates.

PHYSICAL PROPERTIES

MIX RATIO	Pre-proportioned units
COLOR/MIXED	Gray
POT LIFE, 200 grams	40 min. & 25°C
GENERIC TYPE	Amine-cured epoxy
SOLIDS BY VOLUME	100%
VOC	0 lbs./gal.
VISCOSITY @ 25°C	225,000 cps
COVERAGE per GAL.	16 sq ft/gal @ 100 mils
NUMBER OF COATS	1 coat recommended
THICKNESS/COAT	65 Mils minimum
FLASH POINT	450 °F
COMPRESSIVE STRENGTH (ASTM D-695)	
8 HOUR	10,800 PSI
1 DAY	12,600 PSI
7 DAY	13,600 PSI
TENSILE PROPERTIES (ASTM D-638)	
TENSILE STRENGTH	7,680 PSI
ELONGATION AT BREAK	
MODULUS OF ELASTICITY	7.5 X 105 PSI
TENSILE ELONGATION	5-7%
FLEXURAL PROPERTIES (ASTM D-790)	
FLEXURAL STRENGTH	13,200 PSI
FLEXURAL MODULUS	773,200 PSI
BOND STRENGTH (ASTM C-882)	
14 DAY MOIST CURE	3,300 PSI
BOND STRENGTH (ASTM 4541)	500 PSI
SHEAR STRENGTH (ASTM D-732)	4,600 PSI
THINNING	Not required
TEMPERATURE RESISTANCE (dry)	-30-150°F
CERAMIC CONTENT	20% minimum by volume
MIXED CONSISTENCY: SAG FLOW (ASTM C881)	Non-sag at 250 mils

CURING PROPERTIES

POT LIFE: @ 50°-60° F	1 hrs.
@ 60°-80° F	.75 hrs.
@ 80°-100° F	.5 hrs.
DRY TIME: @77° F	
To touch	4 hrs.
Recoat (min)	When firm
Recoat (max)	
50°-60° F	16-72 hrs.
60°-80° F	12-18hrs.
80°-100° F	8-12 hrs.

SAFETY: Refer to "material Safety Data Sheets" for complete information on safety and handling. Take these precautions during application and before coating dries.

Avoid breathing of vapor or spray mist. Avoid contact with eyes and skin, Use a barrier cream on exposed skin. Wash thoroughly after handling. In case of spillage, absorb and dispose of in accordance with local applicable regulations. Do not take internally.

KEEP OUT OF REACH OF CHILDREN

Use with adequate ventilation during application and drying. In tanks and other confined areas, use only with adequate forced air ventilation to prevent dangerous concentrations of vapors which could cause death from explosion or from breathing. Use fresh air masks, clean protective clothing and explosion-proof equipment. Follow OSHA regulations regarding ventilation and respiratory equipment.

IMPORTANT! Any mixture of Components A and B will have hazards of BOTH components.

APPLICATION INSTRUCTIONS

LIMITATIONS: Apply only in good weather, when air and surface temperatures are above 50F and surface temperatures is at least 5 degrees above wet bulb temperature reading. For optimum application properties, maintain product in heated storage between 70 and 90F, or bring this material to this temperature range prior to mixing and application. Dew or rain on SG Mastic while uncured may impair its cure and adhesion of subsequent coats.

SURFACE PREPARATION: Prepare and coat only clean, dry surfaces.

Steel - Prepare surface in accordance with Steel Structures Painting Council Specification NO.1 0 "Near White Blast Cleaning" (SSPC-SP 10-63T). Use proper type and size abrasive to attain an average profile depth of 2.0 mils. Do not reuse sand or flint abrasives. Grit or shot abrasives must be cleaned of contamination before reuse. Blow dust and grit from surface with clean, dry air. Coat within 8 hours and before rust or contamination occurs. Apply SG Mastic as specified directly to properly cleaned steel or over recommended primers. For immersion service, round all welds, sharp edges to a smooth curve and remove all weld spatter before blast cleaning.

Concrete - Surfaces shall be clean, dry, properly cured and free from curing compounds, oil, grease, dirt, chemical contaminant's, waxes or previously applied coatings which are not compatible. Brush blast or Water blast to provide an etched surface and to remove contaminant's and laitants. Remove dust before coating. Apply SG Mastic as specified.

Aluminum and Galvanized - Remove all oil, grease and other contaminant's, then lightly brush blast or etch with specified pretreatment. Prime with recommended primer, then apply SG Mastic.

MIXING: (Mix only complete units) - A Component container is short filled to allow addition of B Component. Add the B Component and thoroughly blend into Part A with Jiffy Mixer for two to three minutes. Allow to stand a minimum of five minutes before application. Usable life of mixed material is function of material temperature. Use within time/temperature limits given in Pot Life section.

THINNING: Do not thin.

APPLICATION: Apply via gloved hand and or spatula. Apply to required thickness. After material has achieved an initial set, about 30-40 minutes, using clean glove, dip gloved hand in recommended solvent, solvent applied to glove will smooth previously applied SG Mastic to desired smoothness. Keep glove constantly wet with solvent. Solvent on surface

will evaporate quickly.

Time Between Coats - Where two coats of SG Mastic are required to achieve the recommended film build, the interval between coats should be as short as possible. To insure maximum inter-coat adhesion it is recommended that: (1) The next coat be applied as soon as possible - after the previous coat is firm. (2) If the previous coat has cured beyond the maximum recoat time given in Drying Time section, uniformly abrade the surface by brush blasting or mechanical grinding to provide an adequate mechanical bond before recoating.

Final Curing Times (Following application of last coat) For immersion service, 12 hours at 77F or higher. Cure times are proportionately shorter at elevated temperatures and longer at lower temperatures.

CLEANUP: Clean all equipment immediately after use with Dinjer #5 Cleaner or xylene.

CONTINUITY TEST SG Mastic shall be tested for holidays at specified voltage. Holiday detector should be used to check continuity of fully cured film. A suitable type is Tinker-Razor Model M-1. Consult equipment manufactures voltage recommendation / mil thickness of applied coating. Holiday areas should be sanded or brush blaster, then recoated over abraded areas only.

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KEEP OUT OF REACH OF CHILDREN

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FIRST AID: In case of skin contact, wash thoroughly with soap and water; for eyes, flush immediately with plenty of water for 15 minutes and call a physician. If affected by breathing of vapor, move to fresh air. If swallowed, call a physician immediately. Do not induce vomiting.

IN CASE OF FIRE: Use dry chemical, foam, water fog or CO2.

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Chemical Resistance

AGENT% WEIGHT INCREASE (DECREASE)

Methylated Spirits	0.514
Distilled Water	0.09
10% Aq. Sulfuric Acid (H ₂ SO ₄)	0.136
70% Aq. Sulfuric Acid (H ₂ SO ₄)	4.10
Gasoline - 90 Octane	0.01
30 wt. SAE Motor Oil	0.02
Isopropyl Alcohol	0.11
Salt Water - 5%	0.10
20% Nitric Acid (HNO ₃)	2.7
10% Sodium Hydroxide (NaOH)	0.086
50% Sodium Hydroxide (NaOH)	0.12
Methyl Ethyl Ketone	D
Xylene	D
10% Acetic Acid (HOAc)	6.14
10% Hydrochloric Acid (HCl)	1.40
30% Hydrochloric Acid (HCl)	0.088
20% Ammonium Hydroxide (NH ₄ OH)	0.84
10% Ammonium Hydroxide (NH ₄ OH)	0.81
95% Ethyl Alcohol	0.37
Acetone	2.1
Ethylene Dichloride	1.5
Toluene	1.4
JP-4 Fuel	(0.01)
10% Citric Acid	0.80
40% Chromic Acid	(5.82)

Chemical & Solvent Resistance

ASTM D543 60T

3" X 1" X 0.125"

Testing performed by AZS Corporation, 2525 South Combee Road, Lakeland, Florida 33801