

Siloxirane[®] 2432

PROTECTIVE LINING FOR ABRASION RESISTANT SERVICE

DESCRIPTION

Siloxirane[®] 2432 is an abrasion resistant two component ambient or low temperature force cured polymer lining system. Siloxirane 2432 is a tough, flexible lining designed to handle the abrasiveness of coal, ore, plastic pellets, ice flows and other media.

Siloxirane 2432 has excellent chemical resistance capable of withstanding the corrosive attack that normally comes with media handled.

APPLICATION HIGHLIGHTS

- Can be applied to pitted and/or corroded steel surfaces — surface tolerant
- Very high abrasion resistance
- High build
- Ambient cure
- Resists ice abrasion
- Low VOC - 102 grams/L (0.85 lbs. per gallon)
- Excellent adhesion
- Flexible to take vibration and twisting
- Easily patched by maintenance personnel
- Steam cleanable
- Complies with FDA 21 CFR 175.300
- Resists hydroblasting

CHEMICAL RESISTANCE

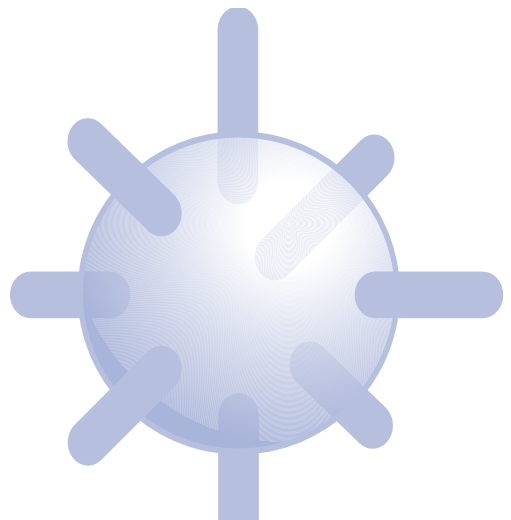
Sulfuric acid to 98%, most solvents including methylene chloride, MEK, methanol, gasohol, distilled water, inorganic acids, dilute organic acids and alkalis. Ideal for corrosive vapor environments.

INDUSTRY APPLICATIONS

- Hopper cars
- Slurry pipe
- Legs of oil platforms
- Pumps
- Underwater areas of ships for resisting ice abrasion
- Small boats and yachts to resist sand abrasion

TYPICAL PROPERTIES

- Color (Normal) _____ Gray
- Weight/Gallon _____ 12.5 lbs.
- V.O.C. Level/Gal. _____ 102 grams/L (0.85 lbs./gal.)
- Lead Content _____ Zero
- Pot Life _____ 30-45 minutes @ 75° F (24° C)
- Viscosity Reduction _____ Reduce with Toluene or Xylene
- Flash Point _____ 127° F (53° C)
- Solids by Volume _____ 91.0%
- Solids by Weight _____ 97.0%
- Chromate Content _____ Zero
- Practical Coverage (sq. ft. per gallon) _____ 70
- Recommended Film Thickness (dry) mils _____ 22 mils average
- Shelf Life _____ 1 year min at 50-90° F (10-32° C)



Superior Corrosion and Erosion Resistance Performance

Chemical Resistance Test

See the APC Chemical Resistance Tables for more complete chemical listings.

	Siloxirane® 2432	Vinyl Ester	Epoxy (Hibulla)	Rubber	Phenolic (Hibake)
Glacial Acetic Acid	A	N	N	L	L
Acetone	A	N	N	N	A
Ammonium Chloride	A	A	A	A	L
Ammonium Hydroxide	A	A	A	A	L
Benzene	A	A	N	N	A
Black Liquor (Paper)	A	A	A	A	L
Bromine Water	A	N	N	N	L
Carbon Tetrachloride	A	A	N	N	A
Chlorine Water	A	A	N	A	N
Chlorobenzene	A	A	A	N	N
Chromic Acid, 50%	A	N	N	A	L
Dichlorobenzene	A	N	N	—	N
Dimethylformamide	A	N	N	N	A
Ethanol	A	A	A	L	A
Formaldehyde	A	A	A	N	A
Furfural Alcohol	A	L	N	N	A
Gasoline	A	A	A	N	A
Hydraulic Oil	A	A	L	L	A
Hydrochloric Acid, 0-37%	A	A	A	A	L
Hydrofluoric Acid, 52%	A	N	N	—	N
Jet Fuel	A	A	A	L	A

	Siloxirane® 2432	Vinyl Ester	Epoxy (Hibulla)	Rubber	Phenolic (Hibake)
Kerosene	A	A	A	L	A
Latex	A	L	L	N	A
Methanol	A	L	N	N	A
Methylene Chloride	A	N	N	N	A
MEK	A	L	N	N	A
MIBK	A	L	N	N	A
Molten Sulfur	A	N	N	N	L
Monochloroacetic Acid	A	N	N	N	N
Nickel Plating	A	A	A	—	A
Phosphoric Acid, 85%	A	N	N	L	L
Sodium Chloride	A	A	A	A	A
Sodium Dichromate	A	L	N	A	N
Sodium Hydroxide	A	N	L	A	N
Sodium Hypochlorite, 17%	A	A	N	N	N
Sulfite Liquor (Paper)	A	A	A	A	A
Sulfuric Acid, 0-98%	A	N	N	A	A
Tallow	A	N	N	N	A
Toluene	A	A	A	N	A
Trichloroethylene	A	N	N	N	—
White Liquor (Paper)	A	A	A	L	A

A = Good at ambient temperatures

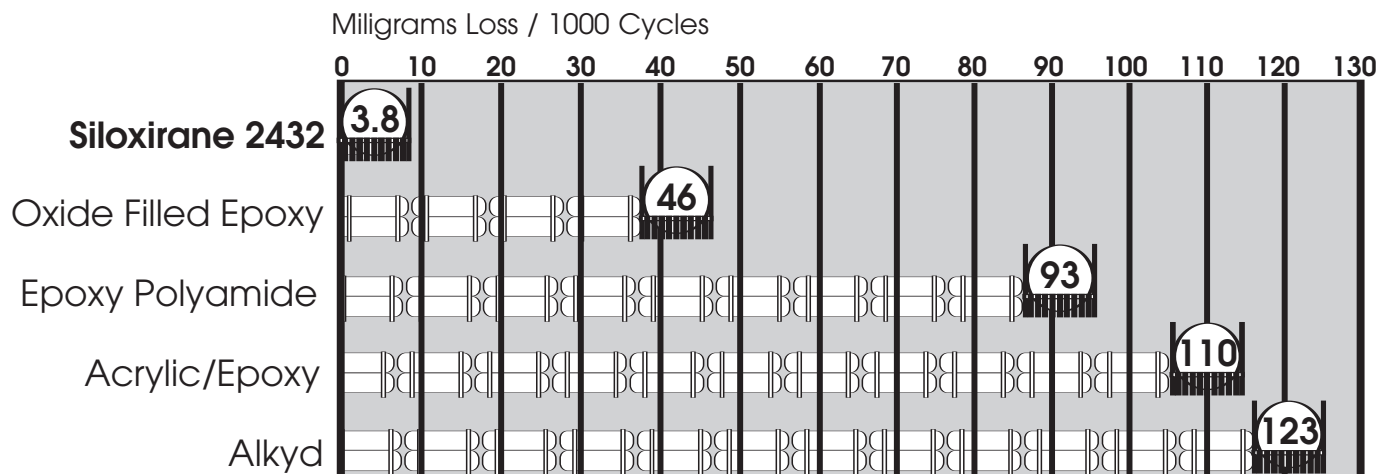
L = Limited Service

N = Not recommended

— = No information

Abrasion Resistance

Taber Abrasion Test ASTM D4060 C-17 WHEEL Comparison of Siloxirane 2432 vs. Various Linings



APPLICATION DATA

Note: The following application data is provided as a **general guide only**. Only full detailed application specifications are to be used during actual application of the Siloxirane 2432 system.

Surface Preparation

Steel:

Grit blast to SSPC5 (Sa 2.5). 3-4 mil (75-100 micron) blast profile.

Concrete:

Abrasive blasting is the preferred method to ensure superior bonding. However, the concrete can be prepared by slurry blasting, hydroblasting, or scarifying. The profile of the prepared concrete should be similar to that of coarse sandpaper.

Mixing Instructions

Material is supplied in two containers as a unit. Always mix a complete unit in the proportions supplied.

- (1) Thoroughly mix the contents of Part A with a power agitator until uniform consistency and color is obtained. Be sure that any solids that may have settled through storage have been put back into suspension.
- (2) Slowly combine the contents of the activator with the previously mixed Part A.
- (3) Thoroughly mix the two parts until a uniform consistency and color is obtained.

Clean Up Solvent

Acetone, Xylene, Toluene

Limitations

Apply when the air and surface temperatures are above 60°F (15°C). Relative humidity must be kept at 60% or lower. The substrate temperature should be at least 5°F above the dew point and rising. For optimum application properties bring material to 68-77°F (20-25°C) prior to mixing and application. Increased temperatures will result in shorter pot life.

Application

Airless spray equipment with minimum 60:1 pump ratio @ 80-100 lbs. To achieve 2500-3000 p.s.i. tip pressure; Reverse-A-Clean tip .019 to .023, with 3/8" fluid hose, and 1/4" whip hose. This coating is a low VOC compliant material. If shop conditions require a viscosity adjustment, thin with Toluene or Xylene.

Recoat Time (Per Coat)

Temp. °F (°C)	Overcoat Minimum	Overcoat Maximum
60 (16)	20 Hrs.	4 Days
68 (20)	18 Hrs.	3 Days
77 (25)	18 Hrs.	3 Days
86 (30)	12 Hrs.	2 Days

Cure Time And Temperature

When application of the complete coating system has been approved, the coating can be cured by either:

A) Ambient Cure @ 75°F (24°C)
{Concrete Application}

To walk on - 24 hours

To drive on - 3 days

For Full Chemical Resistance contact the APC technical department for required time and temperatures for specific chemicals.

Note: Some chemicals will discolor surface.

B) Forced Hot Air {Tank Applications}
- electrically heated air or propane or natural gas combustion heated air only, 6 hours at minimum 200°F (93°C)

All temperatures are substrate temperatures.

Contact APC for detailed heat cure requirements.

Coverage

Practical at recommended film thickness:

2432 — (Avg. 22 mils DFT)
70 sq. ft./gal.

Handling Precautions

Solvents and chemicals are contained in this product. Consult the Material Safety Data Sheet for details. Adequate safety and health precautions should be taken during handling, application and drying of this product. The material should be applied under local, state, federal regulations and in accordance with OSHA and ANSI bulletins on safety requirements.

Siloxirane[®]2432

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COATING	TYPICAL APPLICATIONS	LINING ATTRIBUTES
MarineLine [®]	Cargo tanks, slop tanks, deck tanks	Versatile - wide range of chemical resistance and ease of cleaning
PowerLine [®]	Stacks and ducts (thin wall construction plus thermal shock)	High temperature resistance, best chemical resistance at high temperature, excellent CTE Match with steel
RaiLine [®]	Tank and hopper cars	Versatile - wide range of chemical resistance and ease of cleaning
ChemLine [®] 784/31	Reaction and storage vessels, wet scrubbers, stacks	High temperature resistance, best chemical resistance at high temperature
ChemLine [®] 784/32	Reaction and storage vessels, piping, low temperature stacks and ducts. Lower cure temperature, easy application properties	Excellent chemical resistance, low temperature heat cure
Siloxirane [®] 2431	Cyclone scrubbers, coal chutes, parts	Excellent abrasion resistance, good chemical resistance at high temperatures
Siloxirane [®] 2432	High abrasion resistance with a low temperature cure	Excellent abrasion resistance, good chemical resistance, low temperature cure



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