



## PRODUCT DATA SHEET

# EpoSany® - 791 HS

### Epoxy High Solids Primer and Finish

#### GENERIC TYPE:

Catalyzed Polyamide Epoxy. Part A and Part B mixed prior to application.

**DESCRIPTION:** *EpoSany-791 HS* is a high performance, two component, chemically-cured one coat, high-build epoxy coating system for steel and masonry which can be applied up to 5 mils (125 microns) in one coat. Uniquely formulated to provide corrosion protection for steel and masonry surfaces exposed to water immersion or chemical splash, spillage and fumes. Self-priming on most surfaces. Outperforms Coal Tar Epoxies in all respects, including improved recoatability, toxicity, film embrittlement and application properties. *EpoSany-791 HS is a tank lining system for fresh water, including potable water.*

#### FEATURES:

- Self priming
- Does not contain Coal Tar – no coal tar “burns”
- Ease of application
- Excellent chemical resistances – alkalis, dilute acids, sewage, salt brine, liquid fertilizers, crude oil, etc.
- Excellent water immersion resistance – fresh & salt water
- Abrasion resistant
- Good aged flexibility
- Exceeds performance of Coal Tar Epoxies
- Formulated without lead or mercury containing materials
- May be topcoated with urethane for good appearance

**Limitations of Use:** Not recommended for prolonged contact with strongly oxidizing chemicals, diluted alkalis, ketones, esters, alcohols or for lining tanks used to store “white” petroleum products. Exterior exposure will cause early loss of sheen and chalking, as is normal for epoxy coatings but this does not affect protective properties.

#### RECOMMENDED USES:

**EpoSany-791 HS** is ideal for use on underground steel storage tanks, underground steel piping, in sewage and waste water treatment plants, petroleum refineries, chemical plants, pulp and paper mills, fertilizer plants, hydro and fossil fuel power plants, and underground coal & salt mines. Excellent for fresh and salt water immersion in steel and concrete structures on barges, docks, bridges, piers and pilings, basins, and pits. Can be used on concrete block and poured concrete surfaces in commercial and industrial facilities. *EpoSany-791 System* is recommended for use as a tank lining and heavy duty service system for protection of steel and concrete in water. **EpoSany-791 Primer and Finish** complies with AWWA Standard for Painting Steel Water Storage Tanks, Inside Paint System N° 1, 3.2 (3).

**Special Qualifications:** Meets or exceeds the performance requirements of Corps of Engineers C-200; Steel Structures Painting Council Paint 16; Federal Specification MIL-P-23236B (SH) Type I and IV Class 2.

#### NOT RECOMMENDED FOR:

Immersion Service in water over 130 °F (54 °C), strong mineral and organic acids, or solvents.

**ORDER INFORMATION:** Prices may be obtained from **SanyChem Sales Representative** or main Office.

#### APPROXIMATE SHIPPING WEIGHT :

**Freight Classification:** Paint, Combustible Liquid UN1263, PG III

Packaging:	1½ gallon Kit	7½ gallons Kit
<b>EpoSany-791 HS Primer</b>	20.0 lbs. (9.1 kg.)	94.0 lbs. (42.7 kg.)
<b>EpoSany-791 HS Finish</b>	20.0 lbs. (9.1 kg.)	94.0 lbs. (42.7 kg.)
	<b>1 gallon</b>	<b>5 gallons</b>
<b>SolvenSany # 280 Thinner</b>	8.0 lbs. (3.6 kg.)	37.0 lbs. (16.8 kg.)

#### FLASH POINT (Pensky/Martens Closed Cup) :

	Flash Point
<b>EpoSany-791 HS Primer P/A</b>	20 °C
<b>EpoSany-791 HS Finish P/A</b>	19 °C
<b>EpoSany-791 HS P/B</b>	21 °C
<b>SolvenSany # 280 Thinner</b>	< -6 °C

**Compatibility with other coatings:** May be applied over **ZinCoat-400 HS**, or other as recommended.

#### SPECIFICATION DATA

##### Theoretical Solids Content By Volume:

<b>EpoSany-791 HS Primer</b>	71% ± 2%
<b>EpoSany-791 HS Finish</b>	69% ± 2%

##### Theoretical Coverage Rate per Gallon ( 1½ gallon kit): \*

<b>EpoSany-791 HS Primer</b>	42.6 m²/Lit. at 25 microns. 8.6 m²/Lit. at 125 microns.
<b>EpoSany-791 HS Finish</b>	41.4 m²/Lit. at 25 microns. 8.2 m²/Lit. at 125 microns.

• Mixing and application losses will vary and must be taken into consideration when estimating job requirements. Coverage will be lower over rough surfaces and at higher dry film thicknesses. Heavy applications over organic coatings may result in softening and/or solvent entrapment.

• **Temperature Resistance:** Not affected by steam cleaning. See specific exposure for temperature resistance.

##### Recommended System :

One coat of **EpoSany-791 HS Primer** at 5 mils (125 microns) DFT. Two coats of **EpoSany-791 HS Finish** at 5 mils (125 microns) DFT each. An alternate system in one or two coats of **EpoSany 791 Finish** over **ZinCoat-400 HS** (Inorganic Zinc Primers.)

##### Color Standard in :

<b>EpoSany-791 HS Primer</b>	Brick Red only
<b>EpoSany-791 HS Finish</b>	White(100A1) and Gray (20002) and Gray (20003) are standard. Other colors are available on special order.

• **Abrasion Resistance:** Very Good  
• **Weathering:** Very Good (Chalks-results in fading, most noticeable in dark colors)  
• **Flexibility:** Good  
• **Substrates:** *EpoSany-791 HS Primer* may be applied to properly prepared steel or concrete.

• **Gloss** Finish – Semi-Gloss

• **Shelf Life :** Part A : 24 months when stored at 75 °F (25 °C)  
Part B : 24 months when stored at 75 °F (25 °C)

• **Storage Conditions:** Store indoors.  
Temp.: 40 - 110 °F (4 -43 °C)  
Humidity: 0 - 90%

**Topcoat Required:** The most recommended system is **EpoSany 791 HS Primer** with two coats of **EpoSany 791 HS Finish**. **EpoSany 791 HS Primer** may be topcoated with catalyzed epoxies, vinyls, modified phenolics, or other as recommended. Please consult the appropriate system guide, the particular job specification or your **SanyChem Coatings' Industrial Coatings Specialist** for proper systems using this product.

**NOTE:** A mist coat of **EpoSany-791 HS** is required when applying material over inorganic zinc primers to minimize bubbling.



January 2001 replaces April 1998

To the best of our knowledge the technical data contained herein is true and accurate on the date of publication and is subject to change without prior notice. User must contact **SanyChem** Company to verify correctness before specifying or ordering. No guarantee of accuracy is given or implied. We guarantee our products to conform to **SanyChem** quality control. We assume no responsibility for coverage, performance or injuries resulting from use. Liability, if any, is limited to replacement of products. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY SANYCHEM, EXPRESS OR IMPLIED, STATUTORY, BY OPERATION OF LAW, OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. **SanyChem** and **EpoSany** are registered trademarks of **SanyChem** Company.

# 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:

Remove any oil or grease from surface to be coated with clean rags soaked in **SolvenSany # 280 Thinner** in accordance with SSPC-SP-1-82.

**Steel:** Abrasive blast to a white Metal Finish in accordance with SSPC-SP-5 to a degree of cleanliness in accordance with NACE # 1 to obtain a 1-2 mils (25-50 microns) blast profile.

**Previously Painted Surfaces:** Old coatings should be tested for lifting. If lifting occurs, remove them. Otherwise scuff sand glossy areas and aged epoxy coatings. Clean aged epoxy or urethane coatings with MetalCleaner # 100. Remove cracked and peeling paint. Prime bare areas with a primer specified under **New Surfaces**.

**Concrete:** Do not coat concrete treated with hardening solutions unless test patch indicates satisfactory adhesion. Do not apply coating unless concrete has cured at least 28 days at 70 °F (21 °C) and 50 % R.H. or equivalent time. Apply to properly prepared concrete that was acid etched or thoroughly and uniform sweep sanblasted.

### Mixing:

Mix part A separately, then add Part B in the following proportions and mix thoroughly: Do not mix partial kits.

	1 ½ Gal. Kit.	7 ½ Gal. Kit
<b>EpoSany-791 HS P/A</b>	1 gallon	5 gallons
<b>EpoSany-791 HS P/B</b>	½ gallon.	2½ gallons

### Thinning:

May be thinned up to 20% by volume with **Solvensany # 280**. Thinner.

### Potlife:

2 hours minimum at 75 °F (24 °C) and less at higher temperatures. Pot life ends when coating loses body and begins to sag.

## Application Equipment

Listed below are general equipment guidelines for the application of this product. Job site conditions may require modifications to these guidelines to achieve the desired results. The following equipment has been found suitable and is available from manufacturers such as Binks, DeVilbiss and Graco.



### Application Equipment

Listed below are general equipment guidelines for the application of this product. Job site conditions may require modifications to these guidelines to achieve the desired results. General guidelines:

#### Spray Application

##### Spray

Use sufficient air volume for correct operation of equipment. Use a 50% overlap with each pass of the gun. On irregular surfaces, coat the edges first, making an extra pass later. May be applied by hot spray (Temperature not to exceed 95 °F (35 °C))

The following spray equipment has been found suitable and is available from manufacturers such as Binks, DeVilbiss and Graco.

##### Conventional Spray

Use a 3/8" minimum I.D. material hose. Hold gun approximately 12-14 inches from the surface and at a right angle to the surface.

Mfr. & Gun	Fluid Tip	Air Cap.
DeVilbiss P-MBC or JGA	E	704
Binks #18 or #62	66	63 PB
I.D.	Approx. 0.070" I.D.	

##### Airless Spray

Use 3/8" minimum I.D. material hose. Hold gun approximately 18-20 inches from the surfaces and at a right angle to the surface.

Mfr. & Gun	Pump
DeVilbiss JGN-502	QFA-514 or QFA-519
Binks Model 700	Mercury 5C or B8-36 37:1
Graco 205-591	President 30:1 or Bulldog 30:1

Use a 0.017" - 0.021" tip with 2100 - 2400 psi.  
Filter: 60 mesh

Teflon packings are recommended and available from the pump manufacturer.

## Contact



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

## Phones:



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

SanyChem, Inc

600 N Pine Island Road # 450 Plantation, FL 33324-1311

Phone +1-954-315-0252 / +1 - 800-432-0607 / Fax: +1-954-315-0280

## DRY TIME (Hours)

Surface Temp.	Between Coats	Final Cures
50° F (10 °C)	05 days	
60° F (16 °C)	02 days	3 weeks
75° F (24 °C)	18 hours	10 days
90° F (32 °C)	12 hours	7 days

This time are based on the recommended dry film thickness per coat. Higher film thickness will lengthen cure times. Force curing at 150 °F (66 °C) is recommended for all Tank Lining Service after an initial period of 18 hours at 75 °F (24 °C).

## APPLICATION CONDITIONS

	Material	Surfaces	Ambient	Humidity
<b>Normal</b>	65 – 85 °F (18 – 29 °C)	65 – 85 °F (18 – 29 °C)	60 – 90 °F (16 – 32 °C)	65 %
<b>Minimum</b>	50 °F ( 10 °C )	50 °F ( 10 °C )	50 °F ( 10 °C )	0 %
<b>Maximum</b>	90 °F ( 32°C )	140 °F ( 60 °C )	120 °F ( 43 °C )	85 %

Do not apply when the surface temperature is less than 5 °F or 3 °C above the dew point.



**Brush:** Recommended for touch-up only. Use natural bristle brush applying with full strokes. Avoid rebrushing. Two coats may be required for uniform hiding and film thickness.



**Roller:** Use medium to long nap-roller depending on surface. Thin up to 25% by volume with **SolvenSany # 272 Thinner** for proper flow-out. Two coats may be required for uniform hiding and film thickness.

## 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.

### Ventilation

When used as a tank lining or in enclosed areas, thorough air circulation must be used during and after application until the coating is cured. The ventilation system should be capable of preventing the solvent vapor concentration from reaching the lower explosion limit for the solvents used. In addition to ensuring proper ventilation, appropriate respirators must be used by all application personnel.

### 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.

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



Internet:  
[www.sanychem.com](http://www.sanychem.com)  
[sanychem@cantv.net](mailto:sanychem@cantv.net)  
[sales@sanychem.com](mailto:sales@sanychem.com)