Heat Shield™ *EPX*H2O
a patented product by Synavax™

APPLICATION AND MIXING INSTRUCTIONS

PRODUCT DESCRIPTION:

A two component, water based reactive prepolymer protective insulation coating, with additional chemical, corrosion, and moisture resistance designed for use on pipes, tanks, industrial equipment, and other surfaces.

SURFACE PREPARATION:

All surfaces must be firm, clean, dry, and in sound condition. They should be free of dust, dirt, oil, grease, loose rust or other contaminates. If rust is present it should be removed by wire brush, and treated with a rust neutralizer product. There should be no flaking paint or other contaminates on the surface or adhesion may be adversely affected.

Do not use hydrocarbon solvents for cleaning.

Minimum recommended surface preparation:

Iron & Steel:	SSPC-SP3
Aluminum:	SSPC-SP1
Galvanizing:	SSPC-SP1
Concrete & Masonry:	SSPC-SP13/NACE 6, or ICRI No. 310.2RR, CSP 1-3
Wood, interior/exterior:	Clean, smooth, dust free

APPLICATION CONDITIONS:

Temperature:	55F (13C) minimum 400F (204C) maximum
Relative Humidity:	85% maximum. At least 5 deg. F (2.8 deg. C) above dew point

RECOMMENDED SYSTEMS:

Two coats, minimum, Heat Shield™ ***EPX***H2O applied over clean surface (as stated above).
Each coat should be applied at approximately 10.0 mils (254 microns) wet film thickness. More coats can be used if desired.

If the coating will be subject to U/V exposure, it should be top-coated (1-coat) with a U/V stable coating to prevent chalking. Heat Shield™ High Heat or PT may be used as a top coat at 1-coat.

MIXING AND APPLICATION INSTRUCTIONS:

Before mixing Heat Shield™ ***EPX***H2O, it is important that the surface is completely prepared and ready and that all tools and equipment are ready. Heat Shield™ ***EPX***H2O **has a pot life of 16-24 hours,** which means that it must be used within that timeframe after mixing the Part A and Part B together.

FOLLOW STEP BY STEP INSTRUCTIONS CAREFULLY:

1. Mix contents of each component thoroughly with low speed power agitation. Make certain no pigment remains on the bottom of the can.

2. Then combine ALL of Part A with ALL of Part B as packaged. The Part A will be in a bucket which has enough room to pour the Part B into for mixing.

   If you attempt to mix together less than the pre-packaged amounts, you may get unexpected results which may affect performance and/or adhesion, and the product warranty is voided.

3. Thoroughly agitate the mixture at low speed. Allow the material to set per the induction (Sweat-in) times in the chart below. Re-stir before using.

4. Apply the coating at 10 mils (254 microns), checking film thickness with a wet film thickness gauge. Texture sprayer (use smallest nozzle size) is the desired method of application. Coating may be applied by brush (only if you are careful to keep the pebbled texture - see IMPORTANT note below). We do not recommend application by roller. NOTE: It will typically take at least 2-coats to get a uniform appearance.

5. Allow coating to dry thoroughly to re-coat time as shown below, before applying additional coats.

DRY TIMES AND COVERAGE RATES:

Theoretical coverage rate: 188 S.F. (17.5m2) per gallon at 1-coat coverage of 10.0 mils/254 microns
Recommended application minimum: 2-coats.
Recommended spreading rate per coat: Maximum Wet mils (microns): 10.0 mils (254 microns)

Drying Schedule per coat:	**at 55F/13C**	**at 80F/27C**	**at 120F/49C**
To Touch:	2 hours	1 hour	20 minutes
To Tack Free:	4 hours	2 hours	30 minutes
Minimum re-coat:	**28 hours**	**18-24 hours**	**4 hours**
To Cure:	20 days	14 days	7 days
Induction (Sweat-in) Time:	**60 minutes**	**30 minutes**	**30 minutes**

(Time you must wait after Part A and B are mixed, BEFORE applying)

IMPORTANT!:
The particle size in EPX-H20 is larger than our other coatings, **it is meant to have a pebbled finish. You do not want a smooth finish with this product as you are spraying or brushing because that means that there is no insulating particle in any section that is smooth.** Be sure that you have a pebbled surface throughout the total area of the application. 2-coats minimum are required, but you can apply up to 10-coats according to the desired insulating level.

CLEAN UP INSTRUCTIONS:

Clean spills and splatters immediately with soap and warm water. Clean hands and tools immediately after use with soap and warm water. After cleaning, flush spray equipment with Mineral Spirits, R1K4, to prevent rusting of the equipment. Follow manufacturer's safety recommendations when using any solvent.

PERFORMANCE TIPS:

Stripe coat all crevices, welds, and sharp angles to prevent early failure in these areas.

When using spray application, use an overlap with each pass of the sprayer to avoid bare areas.

Spreading rates are calculated on volume solids and do not include an application loss factor due to surface profile, roughness or porosity of the surfaces, skill and technique of the applicator, method of application, various surface irregularities, material lost during mixing, spillage, overthinning, climate conditions, and excessive film build.

Material should not be reduced with water or any other material.

Excessive reduction of material can affect film build, appearance, and adhesion.

Do not apply the material beyond recommended pot life.

Do not mix previously catalyzed material with new.

In order to avoid blockage of spray equipment, clean equipment before use or before periods of extended downtime with soap and water.

Do not use hydrocarbon solvents for cleaning.

NOTE ABOUT U/V: Discoloration and chalking may occur with direct U/V exposure for long periods of time. If the coating is to be subject to U/V light, it should be top coated at 1-coat with one of the approved Synavax™ coatings.

Do not allow application to be subject to rain or heavy condensation within 72 hours after application.

Do not allow application to be subject to below freezing temperatures within 30 days after application.

SAFETY PRECAUTIONS:

Refer to the SDS before use.
Request a copy from info@synavax.com or 800-858-3176.

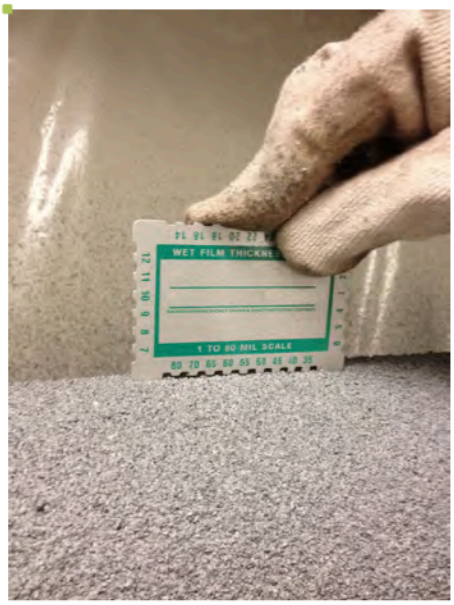
When required, adequate ventilation and proper clothing shall be used.

Synavax™
Customer Service or Technical Inquiries:
US and Canada: 800-858-3176
International: +1 303-228-3701
info@synavax.coml www.synavax.com

Application Overview

- ✓ Prepare surface as you would for any coating project – Wire brush (hand tool clean), make sure surface is clean and dry for proper adhesion.
- ✓ Use Texture Sprayer for Application.
- ✓ Measure Film Thickness (10 mils/254 Microns per coat) with a Wet Film Gauge.
- ✓ Allow coat to completely dry to touch before applying the next coat.
- ✓ 24 Hour Pot Life after the EPX-H20 Part A and Part B have been mixed.

RIGHT



Measuring with wet film gauge.

RIGHT

Pebbled finish throughout application

WRONG!

Surface was smoothed with roller. No insulating particle is there.