



Get Your Sustainability Accelerated™ Today!
We have helped companies around the globe for over a decade.
Award Winning, Anti-Corrosion, Energy Saving & Protective Coatings


DURABLE THERMAL INSULATION FOR TANKS & VESSELS

**FINALLY...A
TANK INSULATION
THAT LASTS AND
PREVENTS CORROSION**

Black liquor tank at
Weyerhaeuser insulated
with Syneffex™ thermal
insulation coating.

Thermal Insulation
Anti-Corrosion
Chemical Resistant
Weather Resistant

www.syneffex.com



Sulfur tank at chemical plant insulated with Syneffex™ thermal insulation coating.



Multiple Benefits | Tanks & Vessels

Corrosion/CUI Prevention

Insulating tanks and vessels can be challenging if you're trying to use a wrapped, fibrous, foam or foam glass insulation. They degrade rapidly, absorb moisture immediately, and are costly to install over large areas. Most importantly, they cause corrosion under insulation (CUI), significantly decreasing asset lifespan.

Long-Term Asset Protection

Facility managers need **THERMAL INSULATION** that's **effective, easy-to-install while tanks are in-service, extremely durable in all weather and factory conditions, and PREVENTS CORROSION**. One that will stand up to harsh outdoor and factory environments without degrading and that will provide consistent insulation performance for decades.

The Solution is Simple and Fast... Easily Installed in Days, Not Weeks

Heat Shield™ EPX-H2O industrial thermal insulation coating by Syneffex™ checks all the boxes when it comes to **effective, durable, non-flammable, and long-term thermal insulation for vessels and tanks** of all shapes and sizes. This coating is a powerful, environmentally friendly, water-based reactive prepolymer containing a low K hydrophobic nanocomposite designed for applications where superior performance is needed.

Industrial and manufacturing customers report energy savings in the range of 15% to 35% or more and payback on their project in just 6 to 18 months on average. The coating can also bring hot temperatures down to safe touch in just 2 to 24 hours.



Methanol tanks at chemical plant insulated with Syneffex™ thermal insulation coating. (Blue tank is coated with custom tinted version.)



Safe Touch Temperature



Low VOC



Moisture Repellent

Bold Plans | Bold Results

Case Study from Large Middle East Chemical Manufacturer Insulated methanol tanks to stop evaporation and prevent corrosion

A petrochemical facility in the Middle East needed to significantly reduce vaporization of methanol inside storage tanks. Traditional insulation could not be used due to the high humidity in the region. Secondly, they also wanted to prevent corrosion on the tanks.

The Solution

Heat Shield™ High Heat insulation coating by Syneffex™ was used on the exterior of the tanks, with the top coat being custom tinted to blue. Syneffex™ technology provided them with an effective thin film solution which was highly durable and effective in the demanding environment.

During the warmest months, the ambient temperature gets as high as 131F (55C). When methanol reaches temperatures in excess of 91F (33C), it begins to evaporate. Syneffex™ stopped the vaporization of the methanol and offered long-term protection.

The tanks are checked every six months for corrosion, and none has been detected since installation of the Heat Shield™ High Heat in the summer of 2008.

Find additional case studies at: https://www.syneffex.com/portfolio_category/tank-insulation/



CERTIFICATIONS

Abrasion Resistance:	ASTM D4060, CS17 wheel, 1000 cycles, 1kg load = 126 mg
Adhesion:	ASTM D4541 = 350 psi
Direct Impact Resistance:	ASTM D2794 = 15 in. lb.
Flexibility:	ASTM D522, 180 deg. bend, 1/4" mandrel = passes
Pencil Hardness:	ASTM D3363 = H (Hard)
Scrub Resistance:	ASTM D2486 = 4,800 cycles
Moisture/Condensation Resistance:	ASTM D4585, 100F (38C), 3000 hours = Excellent
Salt Fog Resistance:	ASTM B117, 750 hours = Excellent
Chemical Resistance:	Splash resistant to acids, bases, and fuels
Service Temperature Range:	-40F to 400F (-40C to 204C)

SPECIFICATIONS

Package Size	2-gallon and 5-gallon kits
Coverage	62.67 S.F per gallon at 3-coats
Typical number of coats used	Varies, from 3 to 12
Typical applied coat thickness	10 wet mils (254 microns) per coat
Typical touch dry time for 1 coat (hot surface)	20 minutes
Typical touch dry time for 1 coat (cool surface)	2 hours
Pot Life (after A&B are mixed)	24 hours
Shelf life	2 years, from date of manufacture



Syneffex™ | Be A Sustainable Leader

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Syneffex™ develops and commercializes innovative applications for sustainability via the science of nanotechnology. Our patented product line is engineered to provide multiple benefits in a single product.

We're Making a Difference. Daily.



Sustainable Awards

BUILDINGS Magazine
Top 2019 Money Saving Product

BUILDINGS Magazine
Top 2012 Money Saving Product

BUILDERNews Magazine
Best Product of 2008

QUALIFIED REMODELER Magazine
A Top 100 Product of 2008

BUILDING PRODUCTS Magazine
Top 100 Award for 2008

JOURNAL OF ARCHITECTURAL
COATINGS Magazine
Top Green Project Pick in 2009
Suvarnabhumi International Airport