# Nu-Chem, Inc. THERMO-LAG 3000

# 100% SOLIDS

#### **PRODUCT DESCRIPTION**

THERMO-LAG 3000 is a two component, epoxy based, thermally activated, subliming coating, which is spray applied directly to primed steel It provides a hard, durable surfaces. aesthetically pleasing finish that allows the shape of the steel to be maintained while providing the specified level of fire resistance.

### **BASIC USE**

THERMO-LAG 3000 is applied to structural columns, beams, vessel skirts, bulkheads, underdecks and electrical raceways to provide hydrocarbon and cellulosic fire ratings for 1 through 4 hours protection. THERMO-LAG 3000 can be utilized for interior and exterior environments.

#### TESTING | CERTIFICATION | RECOGNITION

Underwriters Laboratories, Inc. (UL) Omega Point Laboratories, Inc. (OPL) Lloyd's Register of Shipping (LRS) Det Norske Veritas (DNV) American Bureau of Shipping (ABS) Southwest Research Institute (SwRI) Many Leading Oil and Petrochemical Companies

#### **APPLICATION CONDITIONS**

Air and substrate temperature: above 41°F (5°C) and rising 5°F (3°C) above dew point Humidity: not greater than 85% (Provide heat and/or dehumidification if needed.)

# PACKAGING | SHIPPING

9.0 Gallon (US) Kits (full pails)

#### **STORAGE CONDITIONS**

Store off ground, above 32°F (0°C), below 100°F (38°C) and out of direct sunlight. Prior to spraying, temperature of THERMO-LAG 3000 must be a minimum of 70°F (21°C). Refer to the Nu-Chem's application manual, pre-application checklist (latest edition) and terms and conditions for additional information.

#### PHYSICAL DATA

**Solids** 100%

Net weight per gallon (lbs)

Part A 10.5 ± 5% Part B 11.4 ± 5%

Mixing Ratio (by volume) 1:1

Cure Time @ 77°F (25°C) and 50% R.H.

1 - 5 hours Recoat Touch 1 - 4 hours Handle 48 hours Topcoat 24 hours

Color

Part A **Light Gray** Part B Black Mixed Gray

Consistency **Heavy Mastic** 

**Finish Textured** 

Pot Life: Use only plural component spray

equipment.

V.O.C.

Part A 0 lb/gal (0 q/I)Part B 0 lb/gal (0 g/I)

**Flash Point** 

Part A 185°F (85°C) Part B >200°F (>93°C)

9 Months **Shelf Life** 

# **APPLICATION SUMMARY**

1. Grit blast to:

SSPC-SP6 (Sa2) Onshore SSPC-SP10 (Sa2-1/2) Offshore

2. Apply approved primer

3. First coat - THERMO-LAG 3000

- 4. Apply Fiberglass or High Temperature Fabric reinforcement – depending on design
- 5. Final coat THERMO-LAG 3000 to specified thickness
- 6. Apply approved topcoat

Refer to Nu-Chem's application manual and preapplication checklist (latest edition) for more detailed instructions.

# PLURAL COMPONENT EQUIPMENT

**THERMO-LAG 3000 (100%)** is applied using plural component equipment as follows:

# **Spray Equipment and Hoses:**

Air Tech Spray Systems Inc. (Houston, Texas) Coverdale Pneumatics Ltd. (Bradford, UK) Spray Quip (Houston, Texas - U.S.)

It is essential that all equipment be properly utilized and maintained. Poorly maintained equipment may allow the system to go off ratio. We recommend 2 ratio checks per day.

# Spray Gun:

Binks 1M Mastic Airless Gun or equivalent Remove fluid tube and replace with a gun swivel. Install Graco tip adapter. Gun must have a non-diffuser seat

#### **Spray Tips:**

Graco Heavy Duty RAC (gray key non-diffuser, non-cateye type)

Size: 0.035" to 0.065"

revers-a-clean or equal

Fan Pattern: 6" to 10"

(Note: RAC adapter must be used with Graco

spray tips on a Binks gun)

#### Hoses:

Delivery: 3/4" ID minimum (50 ft

maximum

Whip: 1/2" ID minimum (20 ft

maximum)

Refer to Nu-Chem's pre-application checklist (latest edition) for more details.

#### **THINNERS**

Do Not Thin

# **CLEAN UP**

Pump: Hot Water

Gun, Tips and

Static Mixer: Toluene, MEK, MIBK, or

Xylene or steam cleaning

## **SAFETY PRECAUTIONS**

This product must be installed by trained and certified applicators in accordance with the advice given on this sheet, application manual (latest edition) and Material Safety Data Sheet (MSDS).

All work involving application and use of this product should be performed in compliance with all relevant national and local health, safety and environmental standards and regulations.

In the event welding or flame cutting is performed on metal coated with this product, dust and fumes will be emitted which will require the use of appropriate personal protective equipment and adequate exhaust ventilation.

Consult Nu-Chem for any further questions or advice.

# **DISCLAIMER**

The technical data contained in this data sheet is accurate to the best of our knowledge. No warranty is expressed or implied. For specific warranty information, refer to Nu-Chem's terms and conditions, a copy of which can be obtained upon request.



THERMO-LAG 3000 Protected Steel Column



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