



**TURBO LINER  
PRODUCTS INC.  
1 W. CAMERON  
KELLOGG, ID 83837**

## **Turbo Liner® 1050 H** *Polyurea Polyurethane Copolymer Protective Coating*

### **DESCRIPTION**

#### **FEATURES**

- ❖ High Build, Quick Dry
- ❖ Low Temperature Flexibility
- ❖ Abrasion and Impact Resistant
- ❖ Horizontal Surface Application
- ❖ Plural Component Spray Application
- ❖ Chemical Resistant
- ❖ 100% Solids
- ❖ Tough and Flexible

#### **TYPICAL USES**

Classified by Underwriters Laboratory in accordance with ANSI/NSF 61 for direct contact with potable water. Turbo Liner® 1050 H is recommended for use as a coating or lining on suitably primed carbon steel, non-ferrous metal and concrete for use in:

- ❖ Petrochemical Plants
- ❖ Pipe Lining and Repair
- ❖ Pulp and Paper Plants
- ❖ Concrete Storage Tanks
- ❖ Secondary Containment
- ❖ Water and Wastewater Treatment Plants
- ❖ Mining
- ❖ Power Plants
- ❖ Man Holes
- ❖ Pen Stocks

#### **TYPICAL SYSTEMS**

Carbon Steel  
Primer: Polyprime 3042  
Finish: Turbo Liner® 1050 H

Concrete  
Primer: Polyprime 3042  
Finish: Turbo Liner® 1050 H

Refer to Specification Guide for further detail.

#### **COLOR**

Off-white with a medium sheen gloss.

#### **PACKAGING**

150 Gallon Kit: Side-A: One 55 Gallon Drum, containing 50 gallons. Side-B: Two 55 Gallon Drums, each containing 50 gallons.

The volume mixing ratio is 1A : 2B. Contact Turbo Liner for product availability.

#### **MIXING**

Turbo Liner® 1050 H may not be diluted under any circumstances. Use appropriate solvent for solvent purge line and flushing of equipment and if spraying stops for periods exceeding the potlife of the material. Thoroughly mix Turbo Liner® 1050 H Side-B Base material with air driven power equipment until a homogeneous mixture and color is obtained. Opened material must be used within 1-2 days due to moisture sensitivity.

#### **TECHNICAL DATA**

Flash Point .....	>200°F
Gel Time, 100 ± 10°F .....	40-80 sec.
VOC, ASTM D 2369-81 .....	0 grams/liter
Mixing Ratio by Volume .....	A:B = 1:2
Elongation, ASTM D-412 .....	20%
Dry Film Thickness per Coat .....	20-100 mils

#### **SURFACE PREPARATION**

In general, coating performance is directly proportional to surface preparation. All surfaces must be free of oil, grease, dirt and other contaminants.

Carbon Steel: Remove all contaminants such as oil, grease, dirt, wax or any other chemical product prior to proceeding with surface preparation.

A. Exterior coating: Abrasive Blast to SSSP, SP-10 (Near-white) with a surface profile of 12-22 mils.

B. Internal Lining: Abrasive Blast to SSSP-SP-5 (White metal) with a surface profile of 22-32 mils. Vacuum all surfaces to remove dust, etc., prior to application.

Concrete: Remove all contaminants such as oil, grease, dirt, form oil residue, wax or any other chemical product prior to proceeding with surface preparation.

A. Abrasive Blast using brush blast technique or better to achieve 2-3 mil anchor profile.

B. Vacuum to remove dust, etc., prior to application of primer or first coat.

C. Use fiberglass (C-Veil Glass) or a geotextile cloth to bridge cracks over the primed surface.

See Specification Guide for further detail.

#### **APPLICATION**

Applied over prepared or suitably primed carbon steel or concrete.

Surface Preparation Method:

Carbon Steel: SSSP-SP-10, 5 or SP-12 (WJ-4)

Concrete: Sandblast or Grit Blast to provide a 2-3 mil anchor profile.

Application temperature for Turbo Liner® 1050 H should be between 60-100°F with relative humidity of 0-50%. Do not apply product unless temperature is at least 5° above the dewpoint. Re-coat schedule is 1-3 hours dependent upon environment. See Specification Guide for re-coating guidelines and additional information.

#### **APPLICATION METHODS**

Check area of application to ensure that it conforms to the substrate requirements, as stated in Section 3.04 of the Engineering Specifications. Prime with the appropriate primer. See Engineering Specification Section 4 for more information on specific primers and their associated applications.

Use Graco "Hydra-Cat" 45:1 Airless equipment or equal designed for heated, plural-component, high pressure spray application. High pressure equipment should have the capacity to apply product to a maximum 2500 psi from the proportioner to meet job site conditions.

Heat and maintain material temperature in a range of 95-110°F and utilize insulated material hoses and application equipment to ensure spray consistency, metering and degree of cure of properly mixed product. Band heaters should not be used to heat or maintain temperature.

The conditioned materials shall be supplied to the proportioning equipment at a flowable, pumpable viscosity, and in such volume delivery to assure full supply for each pump stroke.

Recirculation system and solvent purge equipment is necessary to keep material maintained and spray equipment clean during application stoppage and/or for periods when exceeding the product potlife.

All spray equipment must be verified by equipment manufacturer for Turbo Lner or Turbo Liner representative prior to application.

## **CURING**

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***Please read all information in the general guidelines, product data sheets, guide specifications and material safety data sheets (MSDS) before applying material. Published technical data and instructions are subject to change without notice. Contact your local Turbp Liner representative or visit our website for current technical data and instructions.***

### **SAFETY PRECAUTIONS**

This product is for industrial use only by professional applicators and is not intended or suitable for use in or around a household or residential property. Keep away from children and household items. This material contains polyisocyanates. Vapors and spray mist are harmful. Improper handling and use may be hazardous. At all times safety precautions must be strictly followed during storage, handling and application.

### **WARNING**

Individuals with chronic respiratory problems or prior respiratory reactions to such materials should not be exposed to vapors. All personnel entering the application area, including the applicator must wear properly fitted, NIOSH/MSHA approved, fresh air positive pressure air respirators with a full face piece or an air supplied hood.

Keep the material away from sparks, flash and open flames. Containers, even those that have been emptied, may contain dangerous and explosive vapors. Do not cut, drill, grind, weld or perform similar operations on or near containers. Do not pressurize containers to empty them.

### **LIMITED WARRANTY**

Turbo Liner warrants its products to be free of manufacturing defects and that they will meet Turbo Liner current published physical properties. Seller's and manufacturer's sole responsibility shall be to replace that portion of the product which proves to be defective. There are no other warranties by Turbo Liner of any nature whatsoever expressed or implied, including any warranty of merchantability or fitness for a particular purpose in connection with this product. Turbo Liner shall not be liable for damages of any sort, including remote or consequential damages resulting from any claimed breach of any warranty whether expressed or implied. Turbo Liner shall not be responsible for use of this product in a manner to infringe on any patent held by others. In addition, no warranty or guarantee is being issued with respect to appearance, color, fading, chalking, staining, shrinkage, peeling, normal wear and tear or improper application by the applicator. Damage caused by abuse, neglect and lack of proper maintenance, acts of nature and/or physical movement of the substrate or structural defects are also excluded from the limited warranty. Turbo Liner reserves the right to conduct performance tests on any material claimed to be defective prior to any repairs by owner, general contractor, or applicator.

### **DISCLAIMER**

All guidelines, recommendations, statements, and technical data contained herein are based on information and tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty, either expressed or implied. It is the users responsibility to satisfy himself, by his own information and test, to determine suitability of the product for his own intended use, application and job situation and user assumes all risk and liability resulting from his use of the product. We do not suggest or guarantee that any hazard listed herein are the only ones which may exist. Neither seller nor manufacturer shall be liable to the buyer or any third person for any injury, loss or damage directly or indirectly resulting from use of, or inability to use, the product. Recommendations or statements, whether in writing or oral, other than those contained herein shall not be binding upon the manufacturer, unless in writing and signed by a corporate officer of the manufacturer. Technical and application information is provided for the purpose of establishing a general profile of the material and proper application procedures. Test performance results were obtained in a controlled environment and Turbo Liner makes no claim that these tests or any other tests, accurately represent all environments.

## **EQUIPMENT CLEANUP**

### **STORAGE**

Turbo Liner® 1050 H has a shelf life of ... from date of manufacture in original, factory sealed containers.

### **LIMITATIONS**

Turbo Liner 1050 H is not recommended for prolonged exposure to concentrated acids.

Due to its aromatic composition, Turbo Liner® 1050 H will tend to yellow or darken in color after exposure to UV light. Turbo Liner® 1050 H may be topcoated with an aliphatic polyurethane coating for a color-fast glossy finish.

Do not open until ready to use. Store drums on wooden pallets to avoid direct contact with the ground. Avoid freezing temperatures. If stored for a long period of time, rotate Side-A drums regularly. Side-A drums must be stored between 70-95°F.

Side-B Base material must be thoroughly agitated for at least thirty (30) minutes prior to application. Total suspension must be achieved. Side-A Catalyst requires no mixing.

No liability is assumed by Turbo Liner for substrate defects and/or improper substrate preparation and application.

### **WARNING**

This product contains ...