Overview

- **Description**
  VFI-542 Aromatic Polyurea Hybrid Truck Bed Liner System is a 100% solids, two component, fluid applied coating for the protection of the truck beds. This product is fast setting for quick turnaround in production.

- **Usage**
  VFI-542 is primarily used for lining the interior of truck beds in order to provide corrosion protection, resistance to abrasion, skid resistance and to improve appearance.

  Other uses include lining of material handling equipment
  Where improved slip is needed, it is also possible to apply a smooth non-textured surface to enhance ease of loading and unloading trucks
  Please contact your VFI representative for additional information

- **Color**
  Standard color is black. Contact your Volatile Free, Inc. representative for other colors

Physical Properties

- **Hardness**
  Shore A 85-90
  Shore D 55-60

- **Tensile Properties**
  Strength 2410 psi
  Elongation 37%
  Elastic Modulus 12987 psi
  Yield Strength 1464 psi
  Permanent Set 2% max

- **Tear Strength**
  Die C 241 pli

- **Solid Material Density**
  65.75 PCF

- **Cold Temperature Flexibility**
  0.25 inch mandrel @ 2°F Pass

- **Adhesion Strength**
  Prepared steel: 675 lbs/ in² with primer cohesive failure
  Prepared concrete: 825 lbs/ in² with concrete failure

Weather & Environmental Performance

- **Service Temperature**
  -40°F to 180°F

- **Weatherability QUV Test Data**
  ASTM G-53
  No cracking, checking or loss of integrity after 2000 hours. This is an Aromatic product. Light colors yellow when exposed to UV light.

- **Chemical Resistance**
  Contact VFI for with specific chemicals for verification.

- **Fire Resistance**
  Not Rated

- **Hydrolytic Properties**
  - **Water absorption**
    24 hours @ room temperature 0.5%
  - **Water Vapor Permeability**
    ASTM E-96
    0% R.H. @ 73°F 29 mil film: 0.64 perms

Liquid Component Properties

- **Ratio**
  Volume 1 to 1

- **Coverage**
  mi/sq/ft/gal 1600

- **Solids**
  Volume: 100%
Viscosity
- "A" side: 900 cps @ 77°F
- "B" side: 800 cps @ 77°F

Liquid Material Density & Specific Gravity
- "A" side: 9.52 lbs/gal (SG 1.143 g/ml)
- "B" side: 8.25 lbs/gal (SG 0.990 g/ml) (Black)

VOC's
Conforms to Air Pollution regulations. Contains no Volatile Organic Compounds.

Toxicity
ISO component contains polymeric isocyanate requiring fresh air supply respirator, gloves and protective clothing during application.

Shelf Life
- "A" side 6 months in unopened containers @ 50° - 90°F
- "B" side 12 months in unopened containers @ 50° - 90°F

Reactivity
- Gel Time: 2 - 5 seconds
- Tack Free: 15 – 40 seconds when sprayed with hot, plural component airless spray equipment.
- Put Into Service Time: Product can be placed into service light duty after 4 hours and full duty after 24 hours.
- Recoat Time: 2 Hours max

Application

Equipment
Use plural component, 1 to 1 ratio, hot airless spray equipment capable of maintaining a constant temperature of 130 - 150°F and a minimum spray pressure of 1500 psi. Impingement mixing, air purge spray guns are suggested for ease of application.

Material Preparation
The product must be over 65° F for proper mixing and application.

Mixing
Proper mixing equipment must be used to mix the Poly (B) side. Mix for 15 minutes @ 77°F before using. Please contact Volatile Free, Inc. for specific mixer recommendations.

Substrate Preparation
On painted surfaces: Surface must be solvent wiped to remove contaminants from surface. Abrade the surface to provide mechanical adhesion for the coating. Re solvent wipe to remove dust and to soften the painted surface for better adhesion of the coating. For heavy duty service, use a primer.
Non-painted surfaces: Clean surface and abrade for optimal mechanical adhesion. Steel should be white blasted per SSPC-SP10/NACE 2-3 mil. Sandblast or shotblast all concrete surfaces to achieve a profile equal to 80-100 grit sand paper. Refer to SP13/NACE 6. Clean and prime with appropriate primer and apply coatings when primer is set and ready to coat.

Primers
Bare metal use VFI-1003 Primer. To recoat this or other urethane liners use VFI-1007, can also be used for superior adhesion to the painted bed.

Clean-up Solvent
Xylene, MEK. For reduced fire hazard use glycol ethers or environmentally acceptable chlorinated solvents.

Limitations
Contact VFI for appropriateness of this product for your specific application.

Precautions
See Safety Data Sheet for complete safety data. Protect from exposure to moisture. Water will cause the "A" component (ISO) to generate carbon dioxide with resulting high pressure in closed containers. This product can not be crossed mixed with any other coating.

Storage
Storage Stability: Good, minimize exposure to moisture, recommended to purge with nitrogen or argon after use.
Desiccant: Use desiccant cartridge in systems to protect from moisture contamination.
Storage When High Humidity is Present: After use make sure containers are well sealed with a Nitrogen Blanket applied.

Thinning
Do not thin.

Packaging
- 5 gallon pails
- 15 gallon ponies
- 55 gallon drums
- 270 gallon totes

For more information, contact us today at 800-307-9218