VFI-544 QWIK SPRAY SYSTEM TRUCK BED SPRAYLINER ELASTOMER

Overview

- **Description**
  VFI-544 Aromatic Polyurea Hybrid Lining System is a 100% solids, two component, applied truck bed liner.

- **Usage**
  VFI-544 is primarily used for lining of truck beds and repair of existing truck bed liners. It is also possible to apply a semi-smooth non-textured surface where improved slip is needed to enhance ease of loading and unloading trucks. Other uses include:
  - Lining of material handling equipment
  - Under coating of vehicles and as an anti-chip rocker panel coating
  - Water proofing of structures
  - Protection of concrete from some acids and alkaline materials
  - Coating of urethane and extruded polystyrene foam insulation

- **Color**
  Standard color is black. Contact Volatile Free, Inc. for information on custom colors.

Physical Properties

- **Hardness**
  ASTM D-2240
  - Shore A: 87-90
  - Shore D: 39-41

- **Tensile Properties**
  ASTM D-412
  - Strength: 2182 psi
  - Elongation: 110%
  - Elastic Modulus: 3850 psi
  - Yield Strength: 551 psi
  - Permanent Set: 10% max

- **Tear Strength**
  ASTM D-624
  - 187 pli

- **Solid Material Density**
  65.78 PCF

- **Cold Temperature Flexibility**
  ASTM D-3111
  - 0.25 inch mandrel @ 2°F Pass

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 specific chemical verification.

- **Fire Resistance**
  Not Rated

- **Hydrolytic Properties**
  - **Water absorption**
    ASTM D-471
    - 24 hours @ room temperature 0.5%
  - **Water Vapor Permeability**
    ASTM E-96
    - 0.53 perm @ 31 mil thickness

Liquid Component Properties

- **Ratio**
  Volume 1 to 1

- **Coverage**
  One case of six cartridges, 750 x 750 ml, will cover 100 sq. / ft. @ 38 mil thickness.
Solids
- Weight: 100%
- Volume: 100%

Viscosity
- "A" side: 800 ± 300 cps @ 77°F
- "B" side: 1000 ± 300 cps @ 77°F

Liquid Material Density & Specific Gravity
- "A" side: 9.32 lbs/gal. (SG 1.119 g/ml)
- "B" side: 8.22 lbs/gal (SG 0.987 g/ml)

VOC
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.

Storage Stability or Shelf Life
6 months in unopened containers @ 60°F-90°F.

Reactivity
- Gel Time: 2-5 seconds
- Tack Free: 15–40 seconds
- Put Into Service Time: Light duty 4 hours. Full service in 24 hours
- Recoat Time: 4 Hours, after 4 hours use VFI-1007 tie coat primer for best adhesion
- Cure Time: Full cure in 2-7 days

Application

PLEASE VIEW THE QWIK SPRAY SYSTEM TRAINING VIDEO BEFORE SPRAYING THE COATING. Call your VFI representative with any questions.

Equipment
Apply VFI-544 using the Qwik Spray System pneumatic spray dual cartridge gun. Ensure that the compressed air source is dry, and can provide a constant 10 cfm at 90 psi. Use the static mixer with the air atomizer tip supplied with your cartridges.

Material Preparation
Cartridges should be approximately 77-85°F before using. Temperature of the product is very important. Shake cartridges for 30 seconds. Install the static mixer onto the cartridge making sure the cartridge stay straight up until ready to pull the trigger.

Gun Preparation
With 110 psi inlet pressure, set fluid flow to maximum and airflow to the atomizer at 25-50 psi. Different material temperatures require different pressures.

Substrate Preparation
Contact VFI for complete preparation of truck beds.

Spray Techniques
Start spraying on a piece of cardboard or other disposable surface until an acceptable spray pattern is achieved.

This should take 2-3 seconds. When an acceptable spray pattern has been achieved, fan over to the object working with even passes and build coats to the desired thickness. Visually monitor material levels and stop coating application just prior to emptying the cartridge to ensure that an even ratio of the material is applied to the surface. VFI-544 can be textured with typical overspray techniques.

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.

Thinning
Do not thin

Packaging
6 - 750 x 750 ml dual cartridges are sold in a case.