VFI-544 QWIK-SPRAY LINING SYSTEM

Overview

- **Description**
  VFI-544QS Aromatic Polyurea Hybrid Lining System is a 100% solids, two component, fast set protective coating with good strength and tear properties.

- **Usage**
  VFI-544QS 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. Lighter colors may change with UV light. Contact your VFI representative for additional 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 your VFI representative with your specific chemicals for 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% R.H. @ 70°F 31 mil thickness 0.53 perm

Liquid Component Properties

- **Ratio**
  Volume 1 to 1

- **Coverage**
  One case of six kits (750 x 750 ml) will cover 100 sq. ft. @ 38 mil thickness.

- **Solids**
  - Weight: 100%
  - Volume: 100%
**Viscosity**
- "A" side: 750 cps @ 77°F
- "B" side: 850 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

**Storage Stability or Shelf Life**
6 months in unopened cartridges @ 50-90°F.

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

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

**Application**

PLEASE VIEW THE QWIK-SPRAY TRAINING VIDEO BEFORE SPRAYING VFI-544QS.
Call your VFI representative with questions.

**Equipment**
Apply VFI-544QS using a Qwik-Spray pneumatic spray dual cartridge applicator. Ensure that the compressed air source is dry, and can provide a constant 10 cfm at 90 psi. Use the 3/8"X24 static mixer with the air atomizing tip supplied with your cartridges. Standard is a cone spray or a 90° angled tip is available.

**Material Preparation**
Cartridges should be approximately 77°F to 85°F before using. The temperature of the product is very important prior to application. Shake cartridges for 30 seconds. Install static mixer on the cartridge and insert cartridge into the applicator making sure that the cartridges stay upright until you are ready to apply the coating.

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

**Mixing**
A paint shaker can be utilized for the mixing of stored material. Please contact your VFI representative for specific mixer recommendations.

**Substrate Preparation**
Contact your VFI representative for complete preparation procedures for your substrate.

**Priming**
Bare metal surfaces must be primed with VFI-1003 or VFI-1007. VFI-1007 can be used over a painted surface for heavy duty use liners. Use VFI-1007 to recoat over existing bed liners.

**Spray Techniques**
- Start spraying on a piece of cardboard or other disposable surface until an acceptable spray pattern is achieved.
- This should take approximately 2 to 3 seconds.
- Fan over to the object to be coated with even passes, building coats to desired thickness.
- The flow of the material must be continuous. If the flow stops, the static mixer must be changed.
- Visually monitor material levels and cease coating just prior to emptying the cartridge to ensure that an even ratio of the material is applied to the surface.
- VFI-544QS 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 your VFI representative for confirmation 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 resulting in high pressure in closed containers.

**Packaging**
750 x 750 ml dual cartridges are sold in cases of 6 with 36 cases per pallet.

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