



PRODUCT DATA SHEET

CHEM-COAT 9-542-1 TRUCK BED TRUCK BED SPRAY LINER ELASTOMER SYSTEM

TRUCK BED SPRAY LINER SYSTEM

■ 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 @ RT 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
1600 mil square feet per gallon

■ Solids
Volume: 100%

■ Viscosity
Poly Component: 800 cps @ 77°F
Iso Component: 900 cps @ 77°F

■ Liquid Material Density & Specific Gravity
Poly Component: 8.25 lbs/gal (SG 0.990 g/ml) (Black)
Iso Component: 9.52 lbs/gal (SG 1.143 g/ml)

■ 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**

Poly side 12 months in unopened containers
@ 50° - 90°F
ISO side 6 months in unopened containers
@ 50° - 90°F

■ **Reactivity**

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.

- **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

■ **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 Material 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

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