

CHEMICAL RESISTANT URETHANE COATING

■ Description

VFI-577 is a 100% solids, two component, liquid urethane coating.

■ Usage

It is intended for use as a plural component, high build, spray applied coating for the interior of tanks, railroad hopper cars, buildings and other

surfaces where it is desirable to maintain good sanitary conditions or contain materials to prevent contamination of the environment. Suitable substrates include steel, primed wood, concrete, masonry, ferrous and non-ferrous metals.

■ Color

Black, light gray and cream. Contact your Volatile Free, Inc. representative for other colors.

Physical Properties

■ Weatherability

Black has excellent durability. Colors other than black will have limited exterior durability.

■ Chemical Resistance

Good hydrolytic stability to 180°F. Good resistance to inorganic bases, acids and hydrocarbon solvents, fair resistance to oxygenated and chlorinated solvents.

■ Tensile

ASTM D-412

Strength:	3500 psi
Elongation:	50%
Permanent Set:	5% max.

■ Hardness

ASTM D-2240

Shore D	60 ± 5
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■ Tear Resistance

ASTM D-624

Die C	450 pli
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■ Abrasion Resistance

ASTM D-4060

1000 gm load, H-18 wheel, 160 milligram weight loss per 1000 cycles.

■ Cold Temperature Flexibility

ASTM D-3111

Pass 1.0 inch mandrel at 0°F.

■ Adhesion

ASTM D-903

25 lbs./lineal inch, cohesive failure. Adheres well to polyurethane foam, wood, neoprene, Hypalon coatings, acrylic coatings and V.F.I. primers. Primer is required for masonry, concrete and metal. See primer recommendations below for these and other surfaces. VFI-577 can be recoated when set to touch. Surfaces that cure hard (over 14 hours at 70°F) should be recoated with VFI-1007 to insure good innercoat adhesion.

■ Water Absorption

ASTM D-471 Max.

24 Hours R.T.:	1.5%
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■ Water Vapor Permeability

ASTM E-96

Procedure B Max 100% R.H.

Difference at 70°F	0.03 perm In.
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■ Toxicity

Isocyanate contains MDI isocyanate. A fresh air supply respirator, protective clothing and other protective equipment is required for application.

Liquid Component Properties

■ Coverage

Sq. Ft./Gal./Mil 1600

■ Solids

Weight: 100%

Volume: 100%

■ A. P. C.

Conforms to all Air Pollution Control regulations.
Contains no Volatile Organic Compounds.

■ Flash Point

ASTM D-56 (Tag Closed Cup)

Above 200°F.

■ Storage Stability

Poly Component:

One year @ 50° - 80°F.

Iso Component:

Six months @ 50° - 80°F.

■ Thinner

Thinning is not recommended.

■ Viscosity

Poly Component:

1000 cps @ 77°F.

Iso Component:

700 cps @ 77°F.

■ Compressive Strength

3000-6000 psi

■ Coating Density

SP. GR. = 1.16 or 72 lbs./ft.

Application

■ Primer

See Primer Selection Chart.

■ Mixing

Warning: VFI-577 components cannot be crossed mixed with other urethane coating components. Stir "B" Side (Poly) component to suspend any settled pigment.

■ Pot Life

8 to 10 seconds at 70°F and 1 to 3 seconds at 130°F. **Do not** heat above 150°F.

■ Application

Apply only with plural component airless equipment which meters and pumps the components separately to be mixed at the spray gun. Impingement mixing at

the gun has been successful. Material temperature must be maintained above 100°F during application. Apply multiple coats at up to 30 wet mils per coat allowing material to set to touch before applying additional material. When application is to a surface with a temperature between 30°F and 50°F, will set to touch in 3-10 minutes. Higher temperature reduces recoat time accordingly. **Do not** apply to surfaces below 30°F.

■ Cure

Applied coating will set in 30 to 90 seconds at 70°F depending upon film thickness. Can be placed in service after 4 hours cure time at 70°F.

■ Recoat

Can be recoated when dry to the touch. Maximum recoat time is 14 hours. Prime with VFI-1007 if recoat interval exceeds 14 hours.

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