



SacriShield™

Surface Protection Coating Technical Data Sheet

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Selection and Specification Data

Description

VersaFlex SacriShield is a fast set, rapid curing, 100% solids, flexible, two-component polyurea elastomer that provides a temporary protective coating. **SacriShield** is a removable polyurea protective coating that can be used in a variety of applications to protect underlying surfaces on non-porous substrates. Single or multiple pass applications produce films from 10 mils to 100+ mils without visible sag or runs. **SacriShield** is flexible, accommodating to movement of the substrate, yet strong enough to remain intact under all conditions except major structural dislocations. **SacriShield** was designed to adhere to a substrate until it is physically peeled/removed from the substrate.

Ideal For

- Strippable/Temporary Liners
- Removable/Sacrificial coating needs
- Provides protection on shop fabricated parts while transporting to field
- Easily removable temporary protection
- Not for use on small or intricate parts
- Temporarily protects surfaces from scratching or damage

Advantages

- 100% solids, no VOC's
- 1:1 mix ratio by volume
- Fast return to service
- Rapid gel time
- Odorless, no toxic vapors
- Installation temperature range from -40°F to 350°F

Color & Stability (Limitations)

Standard color is Red Shade Blue (VF1300). Custom colors are available upon request. Note: Custom colors are not returnable; custom color options can be viewed at www.versaflex.com. The A-side (Iso) color could vary from clear to amber.

Physical Properties (Typical) -(Post cured at 225°F for 24 hours)

Description	Method	Result
Mix Ratio		1A:1B
VOC (g/l)	Theoretical	0
Solid Content	Theoretical	100%
Gel Time	ASTM D1640	10-12 sec.
Tack Free Time	ASTM D1640	25-30 sec.
Tensile Strength	ASTM D638	2468psi
Elongation	ASTM D638	305%
Modulus of Elasticity	ASTM D638	1721 psi
Die C Tear Strength	ASTM D624	457 pli
Shore D Hardness	ASTM D2240	44

The value ranges stated in this Technical Data Sheet are based on system processing under controlled laboratory conditions. Equipment configuration and/or field application conditions may produce variances in the final system values.

Coverage Rates

Theoretical square feet per gallon

Theoretical coverage is 1604 square feet per gallon at 1 mil DFT. Actual surface coverage will depend on substrate porosity and roughness.

SacriShield is designed for a variety of substrates and applications. Application method, substrate roughness, profile, and porosity will effect coverage rates. Always consult the specification and contract documents prior to installation.



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Substrate and Surface Preparation

General

Prior to coating, the substrate must be prepared in a manner that provides a uniform, clean, sound, and neutralized surface suitable for the specified coating. The substrate shall be free of all contaminants, such as oil, grease, rust, scale or deposits. The substrate shall be free of all dirt, dust, debris, and deleterious material. Coating performance is dependent on the degree of surface preparation.

Substrate composition and moisture, application temperature, exposure temperature, and site conditions may effect primer selection.

Contact VersaFlex Technical Service for more information and recommendations.

Mixing, Thinning and Pre-Warming

Mixing:

B Side must be mixed prior to use. Mix using a manufactures recommended 3-tier, collapsible blade power mixer for at least 30 minutes prior to processing. Mixer diameter should be ½ diameter of the container. Color should be uniform .

Thinning:

DO NOT THIN.

Pre-warming:

A and B components should be warmed to a minimum of 70°F prior to processing.

Application and Equipment Guidelines

General

VersaFlex SacriShield must be installed using plural component, direct impingement mix application equipment.

- Material supply capacity should be 4x the material output of the selected spray gun configuration.
- Processing equipment should be capable of maintaining set temperatures and pressures at rest and during operation.
- Proper equipment selection and maintenance is critical to achieve material properties.
- Additional equipment manufacturers and set-ups are acceptable. Contact VersaFlex Technical Services for additional information and recommendations.

Apply in a uniform manner to desired thickness. Application thickness is determined by spray gun configuration and speed of application. Lower output configurations are recommended for vertical and overhead applications to avoid runs, drips and sags. Excessive thickness does not negatively impact the material properties.

Recommended Proportioners

Graco	Reactor E-XP2
	Reactor H-XP2
	Reactor H-XP-3

Recommended Spray Gun Configuration

Graco	Fusion AP	AR/AF 2929
		AR/AF 3737
		AR/AF 4242
	Fusion MP	XR/XF 3535
		XR/XF 4747
	Probler P2	00 - 02

Recommend Equipment Operating Parameters

A Side Primary Heat	160°F
B Side Primary Heat	160°F
Hose Heat	160°F
Dynamic Pressure	2,000—2500 psi
Dynamic Pressure Differential	< 200 psi
Inlet Pressure	> 90 psi



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Cleanup & Safety	
Cleanup Cured product may be disposed of without restriction. Excess material should be mixed together and allowed to cure and disposed of in a normal manner. Product containers that are “drip free” may be disposed of according to local, state, and federal laws. Caution: VersaFlex SacriShield contains isocyanate. All safety precautions must be followed including proper skin protection and breathing protection. Consult SDS for proper safety suggestions.	Safety Read, understand, and follow all recommendations on the SDS. Review SDS at www.versaflex.com Wash thoroughly after handling, and before eating, drinking, or smoking. Have proper First Aid and PPE on site prior to opening or processing the material. Use chemical safety glasses, or goggles with splash shields. Use impervious body coverings including long sleeve clothing and boots. Use neoprene or nitrile chemical resistant gloves. Use a combination particulate filter and organic vapor respirator.
Application and Service Conditions	
Environmental & Substrate Conditions <ul style="list-style-type: none">• Substrate temperatures must be greater than -20° F. Lower substrate and ambient temperatures will increase the ultimate cure time.• Do not install over damp, wet, or saturated substrates.• The substrate must be 5°F above dew point and rising before application of coating materials. Thinning: DO NOT THIN. Pre-warming: A and B components should be warmed to a minimum of 70°F prior to processing.	Service Temperatures (Temperature Resistance): Dry temperature resistance is -40°F to 250°F. Limitations: VersaFlex SacriShield is not recommended for direct contact with extremely high or low pH chemicals. Refer to the VersaFlex Chemical Resistance Technical Bulletin or contact Technical Services for more information and recommendations. SacriShield is an aromatic based polyurea. Discoloration from exposure to ultraviolet light may occur without affecting the performance characteristics.
Packaging, Handling, & Storage	
Available Packaging SacriShield is available in 30-gallon and 110-gallon kits . The containers are filled by weight. Shelf Life One year from shipment date, in original, unopened factory containers.	Storage Temperature & Humidity 60°F min. 70°F optimum. Keep dry. Keep from freezing. Store in covered temperature controlled environment if possible. Use dry air desiccant for intake vent on drum. Pre-Mix 'B' side well with mixer to re-disperse any settled pigment.



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Warranty

Limited Warranty. Company warrants its goods to be free of manufacturing defects. Goods manufactured by Company will comply with all applicable federal, state and local laws and regulations. Company makes no warranty as to any parts or equipment manufactured by others. Customer shall look solely and only to the manufacturer of such parts or equipment with respect to any warranty claims. Company hereby assigns to Customer the original manufacturer's warranties to all such equipment and parts, to the full extent permitted. THE AFORESAID IS THE EXCLUSIVE WARRANTY AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. SPECIFICALLY, THERE ARE NO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE.

Limitation of Liability. COMPANY'S LIABILITY FOR DEFECTIVE OR NON-CONFORMING GOODS SHALL BE LIMITED TO, AND SHALL IN NO EVENT EXCEED, THE AMOUNT PAID BY CUSTOMER FOR SUCH DEFECTIVE OR NON-CONFORMING GOODS. UNDER NO CIRCUMSTANCES SHALL COMPANY BE LIABLE FOR ANY SPECIAL, PUNITIVE, INCIDENTAL OR CONSEQUENTIAL DAMAGES OR FOR LOST PROFITS. In no event may any claim by Customer arising from or relating to any sale of any goods or services referenced herein be brought more than one year after the date of delivery of such Goods.