TREMCO

TECHNICAL DATA SHEET

VULKEM® 350FC/950NF/EWS HYBRID

Elastomeric, Vehicular Waterproof Traffic Deck Coating System

PRODUCT DESCRIPTION

Vulkem® 350FC/950NF/EWS Hybrid Vehicular Traffic Deck Coating System is designed to have a tenacious bond to concrete and extreme abrasion resistance. It can be driven on in one hour after final application, which will minimize operational disruption. Vulkem Extreme Wearing System (EWS) is a waterproof traffic deck coating system that utilizes polyurethane-methacrylate (PUMA) technology. Vulkem 350FC/950NF/EWS Hybrid Vehicular System is composed of a single layer of 2 component fast cure crack bridging urethane base coat (Vulkem 350FC), an intermediate wear coat (Vulkem 950NF) and a topcoat (Tremco PUMA TC). All Tremco PUMA components are cured using Tremco PUMA Initiator+.

Vulkem 350FC Base Coat is a two-component, fast-curing, VOC-compliant, chemically-curing urethane membrane that bonds firmly to clean, dry, and prepped concrete and metal surfaces. It retains its integrity even if substrate movement causes hair-line cracks of up to 1/16" (1.5 mm). Vulkem 350FC will prevent water migration between itself and the substrate.

Vulkem 950NF Intermediate Coat is a two-component urethane that is applied after the Vulkem 350FC Base Coat has cured. The intermediate coat is loaded with aggregate to give the system excellent impact, abrasion and chemical resistance.

Tremco PUMA TC is a polymethyl-methacrylate topcoat. The PUMA TC adhesion to the aggregate loaded Vulkem 950NF intermediate coat is exceedingly strong. The topcoat affords excellent abrasion resistance, UV stability and chemical resistance to complete the Vulkem 350FC/950NF/EWS Hybrid Vehicular System.

Tremco PUMA Initiator+ is a reactive catalyst in the form of a white powder used to cure all PUMA/PMMA resins.

BASIC USES

Vulkem 350FC/950NF/EWS Hybrid Vehicular System is a fast curing cold-applied traffic deck coating system designed for waterproofing concrete slabs and protecting occupied areas underneath from water damage. Additionally, the system will protect concrete from the damaging effects of chloride, deicing salts, chemicals, gasoline, oils, and anti-freeze. The Vulkem 350FC/950NF/EWS Hybrid Vehicular System is ideal for parking structures, high wear turn and drive lanes, helical turns, ramps, and ticket spitters.

FEATURES & BENEFITS

- PUMA technology delivers extreme durability while maintaining its crack-bridging characteristics, eliminating the need for reinforcing fabric.
- Rapid-set up times allow for quick overall installation, as well as the ability to open up to traffic one hour after the finished application.
- Extremely forgiving application allows users to apply additional coats long after the previous coat has cured.
- Unique chemistry allows for easy repair.
- Compatible with Tremco sealants, coatings, and expansion joints, which is essential for tie-ins, detailing and penetrations.

AVAILABILITY

Immediately available from your local Tremco Sales Representative, Tremco distributor, or warehouse.

PACKAGING

Vulkem 350FC: Total of 4.6 gal kit – Part A: 3.85 gal (14.6 L) in a 5-gal pail, Part P: 0.71 gal (2.7 L) in a 1-gal pail.
Vulkem 950NF: Total of 4.2 gal kit – Part A: 3.25 gal (12.3 L) in a 5-gal (18.9 L) pail, Part B: 0.95 gal (3.6 L) in a 1-gal pail.
Tremco PUMA TC: 6-gal pails

Tremco PUMA Initiator+: 10-lb in 3-gal pails, 25-lb in 6-gal pails, 25 75-g pouches in a box
Tremco PUMA Cleaner: 6-gal pails

COLORS

Tremco PUMA TC is available in Gray, Slate Gray, Charcoal, White, *Beige, Tintable and **Decorative. Universal Color Paks are available for use with Tremco PUMA TC Tintable.

*Denotes special order color. **For use with decorative aggregate.

APPLICABLE STANDARDS

ANSI/UL790 – Standard Test Methods for Fire Tests of Roof Coverings
CAN/ULC/S107 – Methods of Fire Tests of Roof Coverings
CSA-S413

FIRE RATED ASSEMBLIES

Concrete shall be water-cured and attain a 4000 psi minimum compressive strength. Moisture content in the concrete must be lower than 4.5% as measured by a Tramex CME 4 Moisture Meter. Depending on concrete construction and job site location, additional concrete testing may be required. Please contact your local Tremco Sales or Technical Representative.

Please refer to the Vulkem 350FC/950NF/EWS Hybrid Vehicular System Application Instructions for complete application details. The techniques involved may require modification to adjust to job-site specific conditions. Consult your Tremco Sales Representative or Tremco Technical Service for site conditions and requirements.

LIMITATIONS

- Use with adequate ventilation.
- Not for use over expanded polystyrene, extruded polystyrene, poured in place gypsum, lightweight insulating concrete, cementitious wood fiber decks and coal tar pitch.
- Do not apply in falling precipitation or when precipitation is imminent.
- All surfaces must be sound, clean, free of standing water, and free from contamination.
- Any questions regarding drying times, coverage rates and unique application techniques should be directed to Tremco Technical Services or your local Tremco Sales Representative.
- Do not apply over contaminated surfaces.
- Do not thin.
- Substrate must be at least 5 °F (3 °C) above the measured dew point temperatures to avoid dew point conditions.
- Do not store in direct sunlight for prolonged periods.
- Unvented metal pan decks, slab-on-grade and hollow core plank decks require additional qualification prior to application. Please contact Tremco Technical Services for more information.

WARRANTY

A repair or replacement warranty is available on all Tremco products. Visit https://www.tremcosealants.com/warranties/ for details.

TYPICAL PHYSICAL PROPERTIES				
PROPERTY	TEST METHOD	VULKEM 350FC	VULKEM 950NF	TREMCO PUMC TC
VOC Content	Method 310	98 g/L		0 g/L
% Solids (by weight)	ASTM D1353	85%	99%	100%
Drying Time @ 75 °F, 50% RH	ASTM D1640	25 mil film, 3 to 4 hr	20 mil film, 2 to 4 hr	25-29 mils, 1 hr
Weathering	ASTM D822 Weatherometer 350 hr	N/A	N/A	No effect
Elongation	ASTM D638	>500%	100%	130%
Elongation	ASTM D5147			Min 30%
Tensile Strength	ASTM D638 @ 75 °F	>3500 psi	4200 psi	986 psi
Tearing Resistance	ASTM D4073	N/A	N/A	203 lbf
Tear Resistance	ASTM D624	250 psi		
Hardness (Shore D)	ASTM D2240		40	55
Hardness (Shore A)	ASTM D2240	>90		100
Abrasion Resistance (1000 cycles)	ASTM D4060	N/A	70 mg	51 mg
Peak Load @ 73 °F, avg	ASTM D5147			238 lbf/in
Puncture Resistance	ASTM D5602			>56 lbs
Water Absorption	ASTM D570			<0.1%
Water Vapor Transmission	ASTM E96			0.03 perms
Adhesion-in-Peel	ASTM C794	>20 pli		N/A
Self-Ignition Temperature	ASTM D1929			850 °F 454 °C
Smoke Density	ASTM D2843			2.1%
Rate of Burn	ASTM D635			0.2 in/min
Impact Resistance	*ASTM D3029/ULC	400 in/lbs.	400 in/lbs.	Exceeds
Salt Spray	ASTM B117	No Effect	No Effect	No Effect

*Impact is run the to the full system over 3100/psi (21/Mpa) 2” thick concrete. Concrete must crack leaving the coating system intact.

Please refer to our website at www.tremcosealants.com for the most up-to-date Product Data Sheets.

NOTE: All Tremco Safety Data Sheets (SDS) are in alignment with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) requirements.

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