

ChemShield 5631

Novolac Vinyl Ester
Resin Coating System

These unique high performance coatings are heavy duty chemically resistant **systems** for protection against general chemical exposures and immersion service.

ChemShield 5631 utilizes 1/32 inch chemical grade glass flakes, thus offering the desired flexibility, impermeability, application time, and abrasion resistance for maximum performance.

TYPICAL APPLICATIONS

ChemShield 5631 provides excellent chemical resistance and corrosion protection for areas in refineries, petrochemical, petroleum and hydrocarbon storage, chemical processing and pulp mills.

CHARACTERISTICS

The ChemShield 6100 Series is a custom designed coating system that is suitable for specific environmental exposures. The flake glass content provides a low vapor transmission rate with 7.7 times more protection than normal Vinyl Ester Coatings. This gives the coating an extremely high corrosion and chemical resistance in recommended uses. This material is suitable for high solvency and/or high temperature performance. Usage examples include tall oil, super unleaded gasoline, pulp mill red/black liquor, ethyl alcohol, and crude oil. User friendly CS6100 Series is easily repaired by recoating.

TYPICAL PHYSICAL DATA

Finish.....	Flat
Colors.....	White, Green, Gray
Components.....	Two
Curing Mechanism.....	Chemical Reaction
Recommended Minimum Dry Film Thickness.....	40 Mils
Coats.....	Two @ 20 Mils minimum
Theoretical Coverage @ 40 Mils.....	40 ft ² / gal
Volume Solids (calculated).....	100%
Temperature Resistance Dry (Continuous) °F/°C.....	350/177
Wet (Immersed) °F/°C.....	210/97
Flashpoint (CC) Resin °F/°C.....	89/31
Catalyst °F/°C.....	140/60
Applied Over	Steel or Primed Concrete
Primer.....	CS1300 Concrete Primer
Pot Life °F/°C.....	<u>90/32</u> <u>70/21</u> <u>50/10</u>
Hrs.....	½ 1½ 4
Surface Prep...See Application Instructions	
Curing Time to Recoat °F/°C.....	<u>90/32</u> <u>70/21</u> <u>50/10</u>
Hrs.....	3 8 20
Maximum Recoat Times °F/°C.....	<u>90/32</u> <u>70/21</u> <u>50/10</u>
Hrs.....	16 24 36
Curing Time - Immersion °F/°C.....	<u>90/32</u> <u>70/21</u> <u>50/10</u>
Hrs.....	12 24 48
Shipping Data.....	Packaged 5 gal, 55 gal
Shelf Life:Stored Indoors @ 40°F to 75°F Max.....	2 Months From Date of Shipment (Shelf Life Rapidly Reduced Above 85°F)

APPLICATION INSTRUCTIONS

Surface Preparation

All surfaces must be clean and free of dirt, contaminants, and completely dry.

Steel – Non-Immersion: Abrasive blast, SSPC-SP10 Near White Metal Blast to achieve minimum 3 mils (75 microns) profile as determined with a Keane-Tator Surface Profile Comparator or similar instrument. Expansive areas can be primed with primer.

Steel – Immersion: Abrasive blast, SSPC-SP5 White Metal Blast to achieve minimum 3 mils (75 microns) profile. Use a suitable air dryer capable of 35°F dew point air output for all sand-blast compressed air. Welds should be continuous with no skip-welds on overlapping steel surfaces. Round off rough weld and sharp edges and remove weld spatter. Expansive areas can be primed.

Concrete: Light abrasive blast to remove all previous coatings, chalk, and surface glaze or laitance, or acid etch to achieve a glaze-free surface with a slightly granular texture (ASTM D4259, ASTM D4260). Concrete surfaces must be primed.

Application Equipment

The following is a guide, and suitable equipment from other manufacturers may be used. Changes in pressure and tip size may be needed for proper spray characteristics.

Airless Spray: Standard equipment such as Graco President 45:1 with filter and surge tank removed. Graco 'Silver Gun' (208-327) with .017:021 Twist-Tip/Reversaclean or Titan (341-049) spray tip. Use the following airless hose diameters:

25 ft (7.62 mm) or less.....3/8 inch (10 mm)
50 ft (15.24 mm)..... 1/2 inch (12.5 mm)

Brush / Roller: Coating can be brush applied or poured on surface and spread with a roller.

Power Mixer: Jiffy Mixer powered by an air motor or an explosion proof electric motor.

Application Procedure

1. Flush all equipment with cleaner or equal before use. Ground all metal product containers.
2. Stir each component thoroughly, then add catalyst to resin and mix until uniform. Do not mix more material than will be used within the listed pot life for

the given temperature. DO NOT ALLOW MIXED MATERIALS TO STAND IN DELIVERY HOSES EXPOSED TO THE SUN AS HIGH TEMPERATURES WILL CAUSE PREMATURE GELLING.

3. DO NOT ADD THINNERS.
4. Apply a wet coat in even, parallel passes with 50 percent overlap. Cross spray at right angles if needed to obtain a continuous film without bare spots, pinholes, or holidays. Coating thickness is a minimum 20 mils / coat.

Environmental Application Limitations

Keep all equipment and material out of direct sunlight.

Temperature	°F	°C
Air	50 to 120	10 to 49
Surface	50 to 140	10 to 60
Material	50 to 90	10 to 32

Surface temperatures must be at least 5°F (3°C) above dew point to prevent condensation.

SAFETY PRECAUTIONS

OSHA and the EPA classify this material as hazardous due to its flammability and health hazards. Keep away from heat, sparks and open flame. Vapor and/or spray mist can be harmful necessitating the use of an appropriate respirator in certain circumstances. Use appropriate protective eyewear and protective clothing and gloves. Refer to Material Safety Data Sheet before using this product.

WARRANTY

Wolverine Coatings Corp. warrants its products to be free from defects in material and workmanship. Wolverine Coatings Corp.'s sole obligation and Buyer's exclusive remedy in connection with products shall be limited, at Wolverine's option, to either replacement of products not conforming to this Warranty or credit to Buyer's account in the invoiced amount for the non-conforming products. Any claim under this Warranty must be made by Buyer to Wolverine Coatings Corp. in writing within five (5) days of Buyer's discovery of the claimed defect, but in no event later than the expiration of the applicable shelf life, or one year from the delivery date, whichever is earlier. Buyer's failure to notify Wolverine of such non-conformance as required herein, shall bar Buyer from recovery under this Warranty. Wolverine makes no other warranties concerning the products. No other warranties, whether express, implied or statutory, such as warranties of merchantability or fitness for a particular purpose, shall apply. In no event shall Wolverine be liable for consequential or incidental damages.

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