ChemShield 1717

100% Solids AHC Phenolic Novolac Polymer
Technical Data Sheet (TDS)

PRODUCT DESCRIPTION

ChemShield 1717 is a 100% solids, two-component Modified AHC (Advanced Hybrid Cycloaliphatic) Phenolic Novolac Polymer. Exhibiting excellent adhesive properties to various substrates, ChemShield 1717 can be used as a binder or saturant resin. Its low surface tension allows ChemShield 1717 to penetrate deep into fibers and substrates, making it an ideal choice for composite repairs using fiberglass, carbon fiber, and other synthetic fiber-reinforced materials.

ChemShield 1717 is designed for use on concrete, steel, and composite substrates. It offers enhanced chemical resistance, making it a durable solution for aggressive environments. It can be used alone or topcoated with other Wolverine Coatings Corporation products, depending on the application.

For a system recommendation for your specific cargo, environment, and application, contact your Wolverine Coatings Corporation representative.

SAFETY PRECAUTIONS

Prior to commencing work, carefully read and follow all SDS (Safety Data Sheets) along with any instruction manuals for product and equipment used for the application of material. Ensure all jobsite, local, state, and federal safety regulations are followed as they are the responsibility of the installation company, general contractor, engineering, EPC firm and/or facility owner. Reference industry standard AMPP Paint Application Guide No. 10 Guide to Safety and Health Requirements for Industrial Painting Projects.

Consult WCC TIB: "Epoxy Resin Systems Safe Handling Guide" before use.

SURFACE PREPARATION OF SUBSTRATE

Coating performance is directly related to the quality and degree of surface preparation. Prior to overcoating, all surfaces must be clean, dry, undamaged, and free of all contaminants. For more specific information, consult the surface preparation table below.

Substrate:	Properly cleaned and prepared fiberglass, concrete, ferrous & non-ferrous metals.
Surface Preparation	
Fiberglass	AMPP SSPC-7/NACE No. 4
Concrete	AMPP SSPC-13/NACE No. 6
Ferrous Metals	AMPP SSPC-6/NACE No. 3
Non-Ferrous Metals	AMPP SSPC-7/NACE No. 4

APPLICATION DATA

Application Environmental Conditions	
Ambient Temperature Range:	50-100°F
Max Relative Humidity:	80%
Surface Temperature:	55-90°F (>5°F above the Dew Point)

Application Information	
Mix Ratio: (By Volume)	2 Parts Resin (Part A) : 1 Part Hardener (Part B)
Mixing: ChemShield 1717 is packaged in pre-measured containers consisting of Resin Part A and Hardener Part B which must be mixed together before use. Consult WCC Technical Information Bulletin: "Mixing Guide" before installation. Refer to WCC Video: "Mixing Tutorial - Resinous Material" for in depth, step-by-step mixing instructions	
Application Method:	Airless or conventional spray, roller, brush, squeegee, trowel
Thinner:	Not Recommended
Equipment Cleaner:	MEK
Induction Period:	None

Theoretical Coverage
The recommended thickness and coverage of ChemShield 1717 will vary based on the specific application, substrate, and application method, especially when using aggregate, fiberglass, carbon fiber, and other synthetic fiber-reinforced materials.

* Please contact a Wolverine Coatings Corporation representative before specifying or applying ChemShield 1717.

LIQUID PHASE PHYSICAL DATA

Property	Value	Test Method
Solids By Volume:	100%	ASTM D3960
Volatile Organic Compound: (VOC)	0.00 lb/gal	-
Theoretical Flash Point:	Resin: 371°F Hardener: 219°F	-
Mixed Density: (@ 77°F / 50% RH)	9.00 lb/gal	ASTM D1475
Mixed Viscosity: (@ 77°F / 50% RH)	2,400 cps (@10 rpm)	ASTM D2196

SOLID (CURED) PHASE PHYSICAL DATA

All testing conducted at 77°F/50% RH unless stated otherwise		
Property	**Value**	**Test Method**
Color:	Clear (CL1A)	ASTM D1544
Finish:	Gloss	ASTM D523
Hardness: (24 Hours @ 77°F ambient)	70 (Shore D)	ASTM D3363
Bond Strength (concrete):	>1,000 psi (Concrete Fails, no disbonding)	ASTM D541
Abrasion Resistance (Taber):	575-60mg loss (CS-17, 1,000g,1,000 cycles)	ASTM 4060
Elongation:	9.6%	ASTM D638
Impact Resistance: (in-lb)	24 (Direct)	ASTM D5420

Cure Schedule (@ 77°F/50%RH)		
Property	**Value**	**Test Method**
Pot Life (110 mL)	35 minutes	ASTM D3056
Gel Time (110 mL)	37 minutes	ASTM D2471
Minimum Recoat	4 Hours	ASTM D4541
Maximum Recoat	24 Hours	ASTM D4541
Light Foot Traffic	6 Hours	ASTM D5895
Full Foot Traffic	8 Hours	ASTM D5895
Return to Service *	24 Hours	ASTM D5895

* Depends on specific chemical and application. Full chemical resistance at 7 days (77°F / 50% Relative Humidity). Contact your Wolverine Coatings Corporation representative for specific cargo.

SHIPPING DATA & STORAGE

Packaging:	3Q Kits, 3G Kits, 15G Kits, 152.5G Kits (Q=quart units, G=gallon units)

This product must be stored in accordance with local, state, and federal regulations. Storage conditions are to keep the containers in a dry, cool, well-ventilated space and away from sources of heat and ignition. Containers should be stored at 50° F to 95° F. Containers must be kept tightly closed. Shelf life under these conditions is one (1) year.

GENERAL LIMITATIONS

Do not apply over a wet surface.
Epoxies have limited ultraviolet resistance which may cause them to chalk, lose gloss, and / or discolor over time.
Touchup or repair of an existing coating is never aesthetically perfect.
Depending on mix design and curing / drying conditions, minimum age of concrete prior to application is 28 days.

SAFETY
For your safety, all required personal protection equipment should be used when operating machinery or handling chemicals. Concrete dust is a source of silica particles and other hazardous materials that can cause silicosis and other illnesses. Proper safety equipment and methods are the responsibility of the installation company, general contractor, and/or facility owner.

WARRANTY
Wolverine Coatings Corporation warrants its products to be free from defects in material and workmanship. Wolverine Coatings Corporation's sole obligation and Buyer's exclusive remedy in connection with the products shall be limited, at Wolverine Coatings option, to either replacement of products not conforming to this Warranty or credit to the Buyer's account in the invoiced amount of the nonconforming products. Any claim under this warranty must be made by the Buyer to Wolverine Coatings 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 ship date, whichever is earlier. Buyer's failure to notify Wolverine Coatings of such nonconformance as required herein shall bar Buyer from recovery under this warranty.

Wolverine Coatings makes no other warranties about the product. No other warranties, whether expressed, implied, or statutory, such as warranties of merchantability or fitness for a particular purpose, shall apply.

Any recommendation or suggestion relating to the use of the products made by Wolverine Coatings, whether in its technical literature, or in response to specific inquiry or otherwise, is based on data believed to be reliable; however, the products and information are intended for use by Buyers having requisite skill and know-how in the industry, and therefore it is for the Buyer to satisfy itself of the suitability of the products for its own particular use and it shall be deemed that Buyer has done so, at its sole discretion and risk. Variation in environment, changes in procedure of use, or extrapolation of data may cause unsatisfactory results.

LIMITATION OF LIABILITY
Wolverine Coatings Corporation's liability on any claims based upon Wolverine Coatings Corporation's negligence or strict liability, for any loss or damage arising out of, connected with, or resulting from the use of the products, shall in no case exceed the purchase price allocable to the products or parts thereof which give rise to the claim. In no event shall Wolverine Coatings Corporation be liable for consequential or incidental damages.

LITERATURE REVISION - TDS: ChemShield 1717 - Rev. 250227
Published literature is subject to change without notice. Wolverine Coatings Corporation is constantly engaged in the testing of existing formulations, the development of new innovative technologies, and the evaluation of the latest practices. The latest literature should always be consulted at www.wolverinecoatings.com.

Wolverine Coatings Corporation
5969 Highway 221 | Roebuck, SC 29376
Tel: (864) 587-3144 | Fax: (864) 587-3147
e-mail: Sales@WolverineCoatings.com
website: www.WolverineCoatings.com