

RhinoCrete[™] IF Data Sheet

DESCRIPTION: RhinoCrete[™] IF by Rhino Flooring[®] is the latest generation of polyurethane concrete, specifically formulated to provide market leading chemical, heavy impact and thermal shock resistance, while still exhibiting all of the installation properties that professional contractors demand. RhinoCrete[™] IF is an Iron Filled, trowel grade, solid color system that provides uncompromising performance characteristics with user friendly trowel-ability, working time and low odor – a unique formula for success.

TYPICAL USES: RhinoCrete[™] IF is one of the toughest floors available, making it suited to a very wide range of industrial and commercial flooring applications. These include: all food & beverage processing, pharmaceutical plants, commercial kitchens, mechanical rooms, engineering m/c shops manufacturing, loading docks, hot/cold wash areas, chemical processing, chilling/refrigeration areas, prisons and hospitals.

FEATURES & BENEFITS:

• Longer Working Time

• MicrobeuBLOK Antimicrobial

Non-Food Tainting

• ProColor Universal Colorants

· Superior Flow & Leveling

Low Odor/Zero VOC

· Meets USDA, FDA, & CFIA Standards

• Can Be Applied to 5 Day Old Concrete

Self-Priming

• LEED - Renewable Resources

Superior Adhesion Quality

• Excellent Thermal Shock Resistance

Reduced Outgassing

• Excellent Chemical, Stain & Impact Resistance

• Can Be Applied at Lower Temperature, Down to 36°F

• Moisture Tolerant System up to 25 lbs or Internal RH of 99%

 \bullet Service Temperature up to 220°F, or 250°F for Intermittent Spills

• RhinoCrete™ Accelerator available for Fast-Track Projects & Quicker Return to Service

PHYSICAL CHARACTERISTICS		
Mix Ratio (by volume)	1 unit of resin, 1 unit of hardener, and 1 blended aggregate bag	
Viscosity at 70°F	Not Applicable	
Pot life at 70°F	20 minutes	
Cure Time, Tack-Free at 70°F	8 hours	
Working Time at 70°F	25 minutes	
Volatile Organic Compound	(VOC) nil	

APPLICATION METHODS: See application guidelines for details.

PACKAGING: Pre-measured kits: 1 unit of resin, 1 unit of hardener, and a blended aggregate bag

STORAGE: Materials should be stored indoors between 65°F (18°C) and 90°F (32°C)

SHELF LIFE: Unopened containers - 1 year from date of manufacturing. Cement based aggregates should be stored in a dry environment for maximum shelf life.

COVERAGE: One single kit of RhinoCrete[™] IF will cover approximately 20 sq ft @ 1/4" thickness or 14 sq ft @ 3/8"

RHINOCRETE IF (continued):

CHEMICAL PROPERTY	TEST METHOD	HF
Hardness (Shore D)	ASTM D-2240	80
Adhesion	ASTM D-4541	>400 psi, substrate fails
Impact Resistance	ASTM D-2794	>160 in./lb.
Water Absorption	ASTM D-570	<0.1%
Flammability	ASTM E-648	Class 1
Abrasion Resistance: CS17 Wheel 1000 GM Load 1000 Cycles	ASTM D-4060	50 mg loss
Coefficient of Friction (James Friction Tester) Wet Dry	ASTM D-2047	0.9 (smooth) 0.9 (smooth)
Heat Resistance Limitations on Thermal Cycling (5 min. interval) (10 min. interval) Continuous Heat	Hot Oil (400°F) to Ice Water (25°F) Hot Oil (400°F) to Ice Water (25°F) 1 hour 300°F Hot Oil Submersion	40 cycles – no effect 40 cycles – no effect no effect
Compressive Strength	ASTM C-579	9,000 psi
Tensile Strength	ASTM C-307	1,000 psi
Flexural Strength	ASTM C-580	3,500 psi
Flexural Modulus of Elasticity	ASTM C-580	2.6 × 106 psi
Thermal Coefficient of Linear Expansion	ASTM C-531	1.1 × 10-5 in./in.°F

SAFETY PRECAUTIONS: Health Considerations: Consult the Rhino Linings® Safety Data Sheets (SDS) Chemical systems require the use of proper safety equipment and procedures. Please follow the Rhino Linings^a product SDS and Safety Manual for detailed information and handling guidelines. For Your Protection: The information and recommendations in this publication are, to the best of our knowledge, reliable. Suggestions made concerning the products and their uses, applications, storage and handling are only the opinion of Rhino Linings Corporation. Users should conduct their own tests to determine the suitability of these products for their own particular purposes and of the storage and handling methods herein suggested. The toxicity and risk characteristics of products made by Rhino Linings Corporation will necessarily differ from the toxicity and risk characteristics developed when such products are used with other materials during a manufacturing process. The resulting risk characteristics should be determined and made known to ultimate end-users and processors. Because of numerous factors affecting results, Rhino Linings Corporation makes no warranty of any kind, express or implied, other than that the material conforms to its applicable current Standard Specifications. Rhino Linings Corporation hereby disclaims any and all other warranties, including but not limited to those of merchantability or fitness for a particular purpose. No statements made herein may be construed as a representation or warranty. The liability of Rhino Linings Corporation for any claims arising from or sounding in breach of warranty, negligence, strict liability, or otherwise shall be limited to the purchase price of the material.

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