



RIO-COAT UHW

High Solids Urethane, Satin

PRODUCT DESCRIPTION

RIO-COAT UHW is a high solids moisture cured urethane coating. It can be applied clear or pigmented with no filler leaving a high gloss smooth finish, glass beads can be added to provide non-slip, better abrasion resistance with high gloss or aluminum oxide can be added to provide the highest abrasion resistance. The addition of more aluminum oxide will provide a satin finish while adding less will give a gloss finish.

RIO-COAT UHW must be applied to a primed or coated floor. For the best adhesion the basecoat should be applied within 24 hours and be sanded with an abrasive buffing disc typically carborundum 180 grit. RIO-COAT UHW must be applied no thicker than 4 mils. No puddles can be left as the material will gas and create a foam like appearance if thicker films are installed.

APPLICATION COVERAGE RATE

1.5-gallon kit will cover 750 square feet at 3.2 wet mils

6-gallon kit will cover 3000 square feet at 3.2 wet mils

MATERIAL PROPERTIES

Percent Solids, by wt. (by vol.)	Test Method	Results
Part A	ASTM D2369	92.13
Part B	ASTM D2369	91.6
VOLATILE ORGANIC COMPOUND, VOC, LB/GAL (G/L)		
A + B + C	ASTM D3620	0.6 (7.2)

CURED COATINGS PROPERTIES

Abrasion Resistance Taber Abraser CS-17 Taber Abrasion Wheel, 1,000 gram load, 1,000 revolutions	ASTM D4060	18 mg/loss Result based on independent lab testing of rio-UHW™.
Coefficient of Friction – COF, James Friction Tester	ASTM D2047	0.63
Wet Static Coefficient of Friction, BOT 3000	ANSI/NFSI B101.1	0.94
Flammability	ASTM D635	182 mm/min
Resistance to Yellowing As measured using ASTM D2244 after 1000 consecutive hours UV exposure in QUV.	ASTM G154	<10 increase of yellow units (CIE Lab Δb) if pigmented topcoat
Dry Film Thickness, mils [microns]		3.0 [76.2] 1 coat
Tensile Strength, psi [MPa] (resin only)	AST D2370	6,250 (43.09)
Percent Elongation (resin only)	ASTM D2370	6
König Hardness 3 mil, [76.2 micron] film) (resin only)	ASTM D4366	171.3
Water Absorption, 24-hour immersion	ASTM C413	0.2% weight increase

Results are based on conditions at 77°F (25°C)

- Excellent adhesion to substrates and abrasion resistance
- Excellent wetting properties, stain and chemical resistance
- Great choice for all applications where urethane topcoats are being installed
- Extremely low VOC (50 state compliant)
- Minimal to no odor
- User friendly application process
- Non-yellowing, UV stable 100% aliphatic urethane

- Rio Flooring Systems Inc. 2926 Chester Avenue
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WWW.RIOFLOOR.COM



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CHEMICAL RESISTANCE PROPERTIES

Rio UHW Clear	1 Day	7 Days	Rio UHW Clear	1 Day	7 Days
Acids, Inorganic			Solvents (Chlorinated)		
10% Hydrochloric Acid	E	E	Methylene Chloride	P	P
30% Hydrochloric Acid (Muriatic)	E	E	Solvents (Ketones & Esters)		
10% Nitric Acid	E	E	Methyl Ethyl Ketone (MEK)	E	E
50% Phosphoric Acid	E	G	Propylene Glycol Methyl Ether Acetate (PMA)	E	E
37% Sulfuric Acid (Battery Acid)	E	E	Miscellaneous Chemicals		
Acids, Organic			20% Ammonium Nitrate	E	E
10% Acetic Acid	E	E	Brake Fluid	E	E
10% Citric Acid	E	E	Bleach	E	E
Oleic Acid	E	E	Motor Oil (SAE 30)	E	E
Alkalies			Skydrol® 500B	E	E
10% Ammonium Hydroxide	E	E	Skydrol® LD4	E	E
50% Sodium Hydroxide	E	E	20% Sodium Chloride	E	E
Solvents (Alcohols)			1% Tide® Laundry Soap	E	E
Ethylene Glycol (Antifreeze)	E	E	10% Trisodium Phosphate	E	E
Isopropyl Alcohol	E	E	Coffee	E	E
Methanol	E	E	Coke®	E	E
Solvents (Aliphatic)			Ketchup	E	E
d-Limonene	E	E	Mustard	G*	G*
Jet Fuel - JP-4	E	E	Red Wine	E	G*
Gasoline	E	E	3M™ DuraPrep™	G*	F
Mineral Spirits	E	E	Purdue Betadine Solution	G*	G*
Solvents (Aromatic)			Registered trademarks: Tide® of Proctor and Gamble, Skydrol® of Solutia, Inc., Coke® of Coca-Cola Company and 3M™ DuraPrep™.		
Xylene	E	E			

ASTM D1308 Test Method 3.1.1 spot test, covered. Results are based on 1-day and 7-day. Coating cured 2 weeks prior to testing.

Legend:

E - Excellent (No Adverse Effect) - Recommended.

G - Good (Limited Adverse Effect) - Use for short-term exposure only.

*Only adverse effect was staining.

F - Fair (Moderate Adverse Effect) - Not recommended.

P - Poor (Unsatisfactory) - Little or no resistance to chemical.

NOTE: *Reduced chemical resistance and staining is possible in pigmented versions of the system.*

PACKAGING

1.5 Gal Kit

- Part A-Resin (1 Gal)
- Part B-Hardener (1 Quart)
- Part C-Satin Additive (6 pounds)

6 Gal Kit

- Part A-Resin (5 Gal)
- Part B-Hardener (1 Gal)
- Part C-Satin Additive (22 pounds)

The data shown above reflects typical results based on laboratory testing under controlled conditions. Variations from the data shown may result. Test methods are modified where applicable.

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