



RIO-COAT UPA

Polyaspartic Topcoat

PRODUCT DESCRIPTION

RIO-COAT UPA is a unique, very-high-solids urea that utilizes the latest polyaspartic technology. This low-VOC, low-odor, fast-curing, two-part floor coating is an ideal top-coat for various RIO Concrete systems including the RIO Chip Broadcast and RIO Quartz Broadcast systems.

In addition to the rapid cure time, RIO-COAT UPA has very high bond strength, UV resistance, chemical resistance and excellent gloss retention.

RIO-COAT UPA will not blush or haze at higher film thicknesses (15 mils) making it a perfect top-coat choice for the RIO Chip Broadcast and RIO Quartz Broadcast systems. Additionally, if you have a “need for speed” and want to provide a “one-day floor”, use RIO-COAT UPA as a body coat and grout coat for a complete RIO-COAT UPA system.

RIO-COAT UPA is frequently used in spatter environments such as garages, warehouses, and production areas. RIO-COAT UPA has a high-gloss and is UV-stable making it an ideal top-coat for several RIO Concrete systems.

APPLICATIONS

- Commercial - stadiums, restaurants, kitchens, restrooms
- Institutional - corridors, loading docks, storage facilities
- Government - armed Forces bases, parking garages
- Residential - garages and decorative concrete floors
- Industrial - warehousing, production areas, mechanic shops, etc.

TYPICAL PROPERTIES

Solids content:	97% +/-2%	ASTM D2369
VOC Content:	26 g/l	calculated
Gloss @ 60° angle	95°	ASTM D523
Mixed viscosity:	250 cps	ASTM 2196
Gel time:	20 minutes (1-gal mass)	calculated
Dry to touch:	1-2 hours	calculated
Re-coat:	2-3 hours (prep required)	calculated
Water-resistant:	3 hours	calculated
Foot traffic:	8 hours	calculated
Chemical/tire resistant:	3 days	calculated
Full cure:	7 days	calculated
Taber Abrasion (CS-17 Wheel, 1000 cycles):	36 mg	ASTM D4060
Pencil Hardness:	2H	ASTM D3363
Cross-Hatch Adhesion:	5B	ASTM D3359
Impact Resistance:	60%	ASTM D6905
Tensile Strength:	38,234 psi	ASTM D2370
Elongation:	21%	ASTM D2370
Elasticity (Mandrel Bend):	1/8” Pass	ASTM D522

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.

BENEFITS

- Dries for light foot traffic in 2 hours
- Return to service in 24 hours
- Low VOC (50 state VOC and DOT compliant)
- Excellent UV stability
- Superb abrasion and wear resistance
- Good leveling properties without a lot of solvent
- Will not blush or haze at higher film thickness (15 mils)

PACKAGING & COVERAGE

Unit Size Kits: 2:1 by volume

- 3 Gal Kit
(Part A-Resin (2 Gal), Part B-Hardener (1 Gal))
- 15 Gal Kit
(Part A-Resin (10 Gal), Part B-Hardener (5 Gal))

125-180 SF PER GALLON

3-GALLON KIT: 375-540 sf.

Coverage rates may vary due to porosity, density, texture and application methods.

INSTALLATION STEPS

Preparation

Concrete must be cured for 30 days prior to coating, structurally sound, and free of contaminants including but not limited to waxes, loose paint, dust, dirt, grime, oils, release agents, curing compounds, and any surface laitance (a layer of weak and non-durable material). Concrete should be shot-blasted, or diamond ground to achieve a minimum CSP 3 profile, also known as a light shot-blast. When used as a topcoat over freshly applied RIO coatings such as RIO's Epoxy, apply within the stated recoat window or abrade with 80 grit screens prior to application. If being applied over RIO-COAT UPA as a second coat, always screen or abrade. If being applied over a freshly applied non-RIO coating, it is suggested to abrade with 80 grit screens prior to application. If RIO-COAT UPA is being applied over an old or existing resinous flooring, mechanically abrade the surface by grinding with 70-100 grit metal bond diamonds or use 60 grit sand screens. All substrates must be properly prepared by trained or experienced contractors or maintenance personnel. Contact a representative from RIO Flooring Systems with any questions.

All interior concrete floors not poured over an effective moisture vapor retarder are subject to possible moisture vapor transmission that may lead to blistering and failure of the coating system. It is the coating applicator's responsibility to conduct calcium chloride and relative humidity probe testing to determine if excessive levels of moisture vapor emissions are present before applying any coatings. RIO can supply moisture remediation products and information. Consult your RIO representative for more information. RIO and its representatives or sales agents will not be responsible for coating failures due to undetected moisture vapor emissions.

Mixing

Ensure that Parts A and B are at room temperature (59-77°F, 15-25°C) prior to mixing

1. Wear rubber gloves and safety glasses when mixing
2. By volume, pour off two (2) Parts A and one (1) Part B into a separate mixing container
3. Optional – Add up to 15% xylene or suitable solvent (consult your RIO Rep. for which solvent to use when & where)
4. Mix Part A and Part B together with a low-speed mixer for 3 minutes
5. Complete spreading and rolling within 20 minutes

Application

Apply RIO-COAT UPA in a temperature-controlled environment (40-80°F) at a spread rate of 125-180 sf. per gallon to yield 10-12 mils WFT using a 10-mil notched squeegee. Back-roll the spread material immediately with a 3/8" nap or shorter roller. To avoid roller lines or tracking, roll quickly from end to end. Do not exceed 5 minutes between finishing the application of one kit and completely mixing the next kit. Use joints or saw cuts as natural breaks to divide sections of the floor. In hot or humid conditions, apply via 18" roller in a dip and roll method from roller pan. RIO-COAT UPA will cure faster with exposure to moisture in the air. Never apply to a wet or damp substrate. Film thicknesses greater than 15 mils may entrap solvent resulting in entrapped air / CO2 bubbles. If allowed to puddle, CO2 bubbles will appear as white or frosted areas. Contact your RIO representative if a film-build higher than 15 mils is desired.

Maintenance

After completing the application of RIO-COAT UPA, routine sweeping, mopping, washing and mechanical scrubbing is recommended. Water only is sufficient for most environments. Use pH neutral cleaners if necessary. The installer should provide the owner with maintenance instructions. Clean and rinse thoroughly if floors become slippery due to animal fats, oil, grease, or soap film.

Slip Resistance

RIO recommends the use of slip-resistant aggregates such as RIO ULTRA Grip in all coatings or flooring systems that may be exposed to wet, oily or greasy conditions. It is the contractor's and end users' responsibility to provide a flooring system that meets current safety standards. RIO makes no claims of longevity of SCOF or DCOF results. RIO and any representatives or sales agents will not be responsible for injury incurred in a slip and fall accident.