High-performance single-component water-based acrylic-polyurethane satin topcoat.

DESCRIPTION OF THE PRODUCT

FEATURES:

RD-Aquatop PU Satin is a single-component waterborne topcoat based on acrylic and polyurethane resins. Once cured, it forms a hard, flexible, UV-resistant and wear-resistant film, suitable for both decorative and protective purposes in industrial and commercial environments.

Applied over most RD Coatings primers and systems, it delivers a smooth, aesthetically refined satin finish with excellent resistance to humidity and outstanding outdoor durability — thanks to its high-quality pigment technology. It can also be applied directly on a range of substrates including wood, concrete and many others.

Virtually odour-free, non-flammable and fast-drying, RD-Aquatop PU Satin is ideally suited for application in occupied buildings and sites where solvent emissions are restricted or prohibited. Its rapid drying properties minimise operational disruption and significantly improve on-site productivity.

TYPICAL APPLICATION:

- ✓ Decorative and protective finishing for interior and exterior surfaces
- ✓ Steel structures, concrete, wood, various plastics and coated surfaces
- ✓ Buildings and structures in occupied or sensitive environments
- ✓ Applications where low odour and non-flammability are required
- ✓ Food and pharmaceutical industries
- ✓ LEED and Living Building Challenge certified projects

KEY FEATURES & BENEFITS:

- ✓ Single-component — ready to use, no mixing required
- ✓ Water-based, low VOC — reduced environmental footprint
- ✓ Non-flammable — no fire hazard
- ✓ Fast-drying — minimal downtime and site disruption
- ✓ Hard, flexible and wear-resistant film
- ✓ Virtually odour-free — suitable for use in occupied areas
- ✓ UV-resistant with excellent outdoor durability
- ✓ Smooth satin finish — aesthetically refined
- ✓ LEED and Living Building Challenge compliant

SUBSTRATES:

- ✓ Ferrous metals (with primer RD-Monoguard or RD-Speedcoat Aqua)
- ✓ Non-ferrous metals: stainless steel, aluminium, etc. (with primer RD-Multiprim)
- ✓ Wood (including tannic and exotic woods)
- ✓ Concrete and cement
- ✓ Various hard plastics
- ✓ Pre-painted and coated surfaces
- ✓ Also suitable for many other properly prepared substrates

RECOMMENDED SYSTEMS

GENERAL PURPOSE APPLICATION

Application on primed surfaces, brick, concrete, wood and previously painted surfaces. Apply one or two coats depending on the level of protection and finish quality required.

Product	Minimum total dry film thickness in µm | mils	Minimum number of coats (*)	Total theoretical consumption ± (**)	Total theoretical coverage ± (**)
RD-Aquatop PU Satin	50 µm | 2 mils	1	0.13 L/m²	7.8 m²/L | 315 sq-f/gal

FERROUS METALS

Product	Minimum total dry film thickness in µm | mils	Minimum number of coats (*)	Total theoretical consumption ± (**)	Total theoretical coverage ± (**)
RD-Monoguard	75 µm | 3 mils	1	0.17 L/m²	5 m²/L | 230 sq-f/gal
+ RD-Aquatop PU Satin	50 µm | 2 mils	1	0.13 L/m²	7.8 m²/L | 315 sq-f/gal

NON-FERROUS METALS (stainless steel, aluminium, ...), plastics

Product	Minimum total dry film thickness in µm | mils	Minimum number of coats (*)	Total theoretical consumption ± (**)	Total theoretical coverage ± (**)
RD-Multiprim	40 µm | 1.6 mils	1	0.10 L/m²	10 m²/L | 400 sq-f/gal
+ RD-Aquatop PU Satin	40 µm | 1.6 mils	1	0.10 L/m²	10 m²/L | 390 sq-f/gal

WOOD, CONCRETE, HARD PLASTICS

Product	Minimum total dry film thickness in µm | mils	Minimum number of coats (*)	Total theoretical consumption ± (**)	Total theoretical coverage ± (**)
RD-Aquatop PU Satin	80 µm | 3.2 mils	2	0.2 L/m²	5 m²/L | 190 sq-f/gal

PRE-PAINTED ELEMENTS (doors, plinths, ...)

Product	Minimum total dry film thickness in µm | mils	Minimum number of coats (*)	Total theoretical consumption ± (**)	Total theoretical coverage ± (**)
RD-Aquatop PU Satin	40 µm | 1.6 mils	1	0.1 L/m²	10 m²/L | 390 sq-f/gal

TANNIC AND EXOTIC WOODS

Product	Minimum total dry film thickness in µm | mils	Minimum number of coats (*)	Total theoretical consumption ± (**)	Total theoretical coverage ± (**)
RD-Deco Isomat	50-75 µm | 2-3 mils	1	0.15 L/m²	7.5 m²/L | 290 sq-f/gal
+ RD-Aquatop PU Satin	40 µm | 1.6 mils	1	0.10 L/m²	10 m²/L | 390 sq-f/gal

(*) Number of coats
Depends on the application method, tools used and site conditions. Certain application methods may require additional coats. Achieving the specified dry film thickness in fewer coats is not recommended and may not be technically feasible.

(**) Theoretical consumption
Values are theoretical and may vary depending on surface profile, shape, roughness, porosity, application method and site conditions. Higher consumption should be anticipated.

Occasional contact with chemicals and/or intensive surface wear
The system can be top coated by one or two additional coats of RD-Hydrograff HP if not already specified in the system.

For project-specific recommendations, please contact your RD Coatings representative.

APPLICATION INSTRUCTIONS

APPLICATION CONDITIONS:

Ambient temperature:
- Minimum: 5°C | 41°F – beware on condensation risks and slow drying
- Optimal: 12-25°C | 54-77°F

Relative humidity: **maximum 80 %**
Surface temperature: minimum **3°C | 5°F above dew point**.
Avoid application during winter conditions or periods with high condensation risk.

APPLICATION METHODS:

Brush
Roller
Airless spray (recommended):
- Nozzle size: 0.007–0.009
- Pressure: 70 bar | 1000 psi

Conventional (low pressure/HVLP):
- Nozzle size: 1.4 mm | 0.0551 in
- Pressure: 4-6 bar | 60-90 psi

Note: Additional coats may be required depending on the application method.

SURFACE PREPARATION:

General:
The substrate must be clean, dry, degreased, and free from dust, salts, oil, grease, and all non-adherent materials prior to application.
RD-Eco PowerClean is recommended as a pre-cleaning agent. Apply RD-Eco PowerClean, allow to react for 10–15 minutes, then rinse thoroughly using high-pressure water.

Specific substrates:

- Tannic or exotic woods: apply RD-Deco Isomat Aqua as a first coat to prevent tannin migration through the paint film.
- Ferrous metals: a primer is required — RD-Monoguard or RD-Speedcoat Aqua recommended.
- Non-ferrous metals: RD-Multiprim primer required.
- Existing paints & coatings: only apply over sound, clean and well-adhering surfaces. Light to moderate sanding may be required. Perform adhesion test first.

Refer to the respective product PDS for detailed surface preparation.

Note: Surface preparation may affect finish and performance. Contact your RD Coatings representative for guidance.

DILUTION: Product is ready-for-use.

DRYING TIME: (20°C | 68°F)
Touch dry: ± 1.5 hour
Dry: ± 2 hours
Recoatable: ± 4 hours – No maximum recoating window.
Drying times also depend on film thickness and ambient humidity.

CLEANING OF TOOLS: Water.

SPECIFICITIES: Mix homogenously with a paddle mixer at low speed.

TECHNICAL DATA

FINISH:	Satin - Minimum 35% +/- 5 (Gardner 60°), depending on the shade.
COLORS:	White. RAL, NCS and bespoke colors available via the RD Coatings tinting system. Also available in a clear version – please refer to RD-Monovar PU.
DENSITY:	1.2 ± 0.05 Kg/L | ± 10 lb/gal (US)
SOLIDS CONTENT:	In weight: 47 % ± 2 In volume: 39 % ± 2
VISCOSITY:	20 - 30 P (Brookfield 20RPM)
VOC CONTENT:	< 50 g/L | 0.38 lb/gal (US)
FLASH POINT:	Non-flammable.
STORAGE STABILITY:	24 months: keep away from heat and frost

PERFORMANCE STANDARDS & TEST RESULTS

Standard / Norm	Short description	Result
ISO 16000-6	Indoor air VOC emissions	A+
Living Building Challenge v4.0 – Red List	Restricted substances compliance	Compliant

DoP, EPD and/or performance criteria with more details are available upon request.

SAFETY DATA

Information related to hygiene and safety can be found in the Safety Data Sheet available on request.

DISCLAIMER

These specifications are given for information. Since the manufacturer is not able to check the application of the products, he cannot accept any responsibility for it. This technical data sheet replaces all previous editions.