

# High Solids Polyurethane RT-HSU

## Technology Description

ResinTek coatings represent the next generation of epoxy flooring technology. Many of these high-performance coatings utilize domestically produced soybean oil and environmentally friendly packaging.

## Product Description

ResinTek H SU is a two-component, high solids gloss aliphatic polyurethane coating designed for industrial maintenance applications. ResinTek HSU contains near zero VOCs and has very little odor during application. It offers excellent wear properties and chemical resistance for high performance applications. It is suited for use as a topcoat over an epoxy system or alone over primed floor surfaces.

## Typical Properties at 70°F

Abrasion Resistance, 1000 cycles/CS-17, 1000gm (ASTM D-4060)	30 mg
Coefficient of Friction	0.84
VOC	0.12 lb/gal; 16 gm/l
Volume Solids	92%

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.

## Installation Data

Storage Environment	Dry Area, 65-80°F
Application Temperature, Ambient	50-85°F
Application Temperature, Substrate	Minimum 5°F above dew point
Shelf Life	1 year
Pot Life, @ 77°F	60 minutes
Foot Traffic, @ 77°F	12 hours
Full Service, @ 77°F	48 Hours

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## Important Information

1. Vehicles should not be parked on coating within 36 hours of installation.
2. Not designed for exterior use or immersion applications.
3. Floors should be sloped to drain to prevent standing water or chemicals.
4. Confirm product performance in specific chemical environment prior to use.
5. Prepare substrate according to "Surface Preparation" portion of this document.
6. Do not apply to slabs on grade unless a heavy unruptured vapor barrier has been installed under the slab or where moisture or MVT is present.
7. Always use protective clothing consistent with OSHA regulations during use.
8. Refer to the Safety Data Sheet for detailed safety precautions.
9. For industrial/commercial use. Installation by trained personnel only.

## Benefits

- Excellent gloss and color retention
- Non-yellowing, UV stable formula
- Resists attack by most acids, alkali, detergents, lubricating oils, solvents, and chemicals
- Good abrasion resistance
- Near zero VOC, low odor; ideal for use in confined spaces where occupants are present

## Recommended

- Warehousing & manufacturing facilities
- Educational & institutional facilities
- Automotive service bays
- Hospitals & healthcare facilities
- Stadiums & other entertainment venues
- Aircraft hangars
- Laboratories
- Animal holding areas

**Generic Description:** Aliphatic Polyurethane

**Typical Application:** Final Topcoat over ResinTek epoxy

**Standard Colors:** Clear. (Variety of color pack options available)

**Packaging:** 2.5 Gallon unit

**Coverage:** 350 Ft<sup>2</sup> @ 4.5 mils WFT

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## Surface Preparation

**Concrete:** Apply only to clean, dry, and sound concrete substrates that are free of all coatings, sealers, curing compounds, oils, greases, or any other contaminants.

- New concrete should be cured a minimum of 28 days.
- Concrete that has been contaminated with chemicals or other foreign matter must be neutralized or removed.
- Remove any laitance or weak surface layers.
- Concrete should have a minimum surface tensile strength of at least 300 PSI per ASTM D-4541.
- Surface profile shall be CSP-3 to CSP-5 meeting ICRI (International Concrete Repair Institute) standard guideline #03732 for coating concrete, producing a profile equal to 60-grit sandpaper or coarser. Prepare surface by mechanical means to achieve this desired profile.
- Moisture vapor transmission should be 3 pounds or less per 1,000 square feet over a 24-hour time period, as confirmed through a calcium chloride test, as per ASTM E-1907. Quantitative relative humidity (RH) testing, ASTM F-2170, should confirm concrete RH results <75%.
- All surface irregularities, cracks, expansion joints and control joints should be properly addressed prior to application.
- Outgassing may occur due to the porosity of some concrete surfaces. To reduce the effect of outgassing, the primer and coating should be applied when the temperature of the concrete substrate is dropping. This usually occurs in the evening; however, the concrete substrate temperature should be measured with a surface thermometer for verification. Double priming will greatly reduce the effects of outgassing by additionally filling the pores in the concrete.

## Installation Steps

1. ResinTek HSU is normally applied over a ResinTek Primer such as ResinTek MVE or ResinTek HPE. ResinTek HSU is also used as a finish coat over a ResinTek epoxy floor coating system. See applicable data sheets for detailed installation instructions of these products. NOTE: For use as a topcoat for ResinTek epoxy coatings, apply within 24 hours of epoxy installation. If 24 hours has passed, sand the coating using 100 grit or smaller pads and wipe with a 50:50 mixture of water and isopropanol. Once cleaner solution has flashed, proceed with application of ResinTek HSU.
2. Premix Part A Resin with a mechanical jiffy-type mixer operated at medium speed.
3. If a Color pack is to be used, blend color pack with Part A prior to adding Part B
4. Pour Part B Hardener into Part A Resin and mix for two additional minutes at medium speed.
5. For best results pour material into roller pan and apply by dip and roll. Apply at 3 to 5 WFT using 1/4" or 1/8" nap rollers; coating may foam at a greater film thickness. To minimize lap lines in the finish coat, immediately cross roll material (uniform 90° angle to initial coat). Use 18" rollers whenever possible.