



SPIDER

Resin

Isocyanate Free Polyurethane

www.spiderresin.com

THE FUTURE OF FLOORING AND PAINT RESIN IS HERE


SPIDER Resin™ is designed for indoor/outdoor applications for coatings requiring low toxicity, durability and water resistance properties.

Contact: info@spiderresin.com


THE PRODUCT

SPIDER Resin™ is a patent pending, modified resin that has zero VOC and zero BPA/F.

SPIDER Resin™ when combined with hardener, creates an Isocyanate free Polyurethane resin system. SPIDER Resin™ designed for indoor/outdoor applications for coatings requiring low toxicity, durability and water resistance.


 Low in Toxicity

 High Abrasion

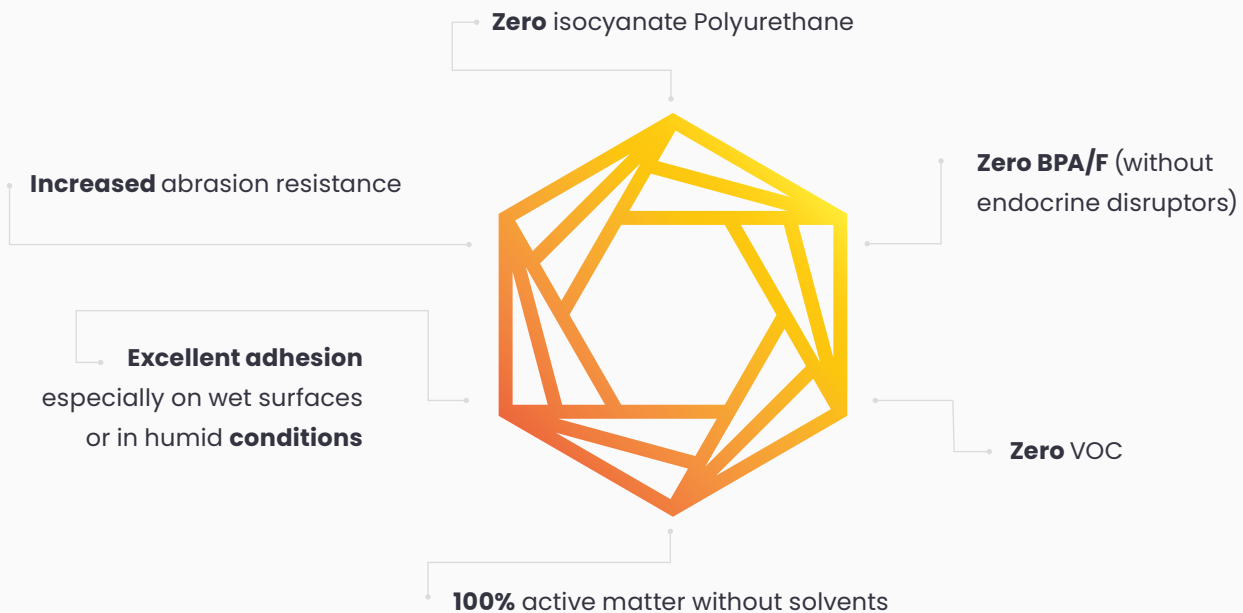
 High Impact

 Chemical Resistant

 Water Resistant

 Rigid with UV resistance, with Urethane Chains

SPIDER Resin™ complies with REACH guidelines to be classified as a Polymer.



ADVANTAGES

- Zero BPA/F (without endocrine disruptors)
- Zero isocyanate Polyurethane
- Zero VOC
- 100% active matter without solvents
- Excellent moisture and chemical resistance
- Excellent adhesion properties even on wet surfaces or in humid conditions
- High impact and tensile strength
- High gloss and color retention
- Low viscosity
- Easy cleaning
- No ADR transport regulation for road transport (resin only)

APPLICATION

Spider Coatings can be applied to many surfaces including metal, concrete, wood, gypsum, ceramic tiles and VCT and is particularly useful on applications requiring higher safety and sanitation standards, and in heavy traffic on corrosive surface areas requiring excellent adhesion.



Flooring



Waterproofing



Paint Systems



Electrical Potting



Resin Bound



Low to Medium Voltage
(due to low reaction heat)

HIGHLY FLEXIBLE

ATTRIBUTES *

Sulfuric acid 10% H₂SO₄

Gloss reduction

Sodium hydroxide 10% NaOH

No effect

Motor oil

No effect

Brake fluid

No effect

Aviation hydraulic fluid

No effect

Shore D Hardness

42 - 90

Tensile strength

16 MPa

Elongation

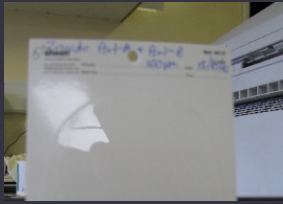
62%

180 Bend test

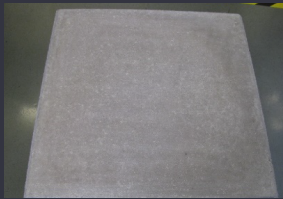
Pass

* Attributes will change based on version of Spider Resin

PULL OFF TESTING



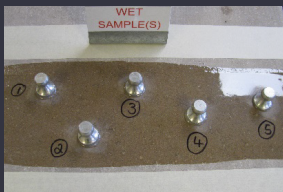
- Spider Resin samples Part A & Part B
- Small mix prepared using 100 Part A to 35 Part B by weight mix ratio Drawdown @ 100 micron - gloss 90.9%
- Drying time @ 75 micron - approx. 5.5 to 6 hour



Concrete paving slab – top surface abraded with grind stone to remove excess laitance, dampened to remove residual dust and left to dry overnight



Another mix of resin prepared and applied to concrete @ 100 micron and left to cure over weekend

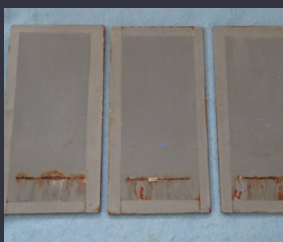


Surface of resin film and of 5 x 20mm pull-off dollies prepared, before dollies applied to resin film using Araldite Rapid adhesive. Left to cure for 4 days

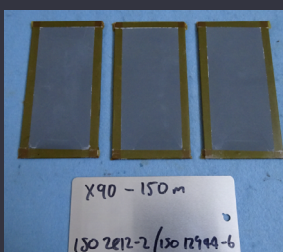


Using 20mm cutting tool, the coating around the edges of the dollies were cut through, and excess adhesive and debris removed

SALT SPRAY / IMMERSION TESTING IN ZINC PRIMER WITH SPIDER RESIN



80 Micron Plate after C5H ZX90-80 Micron -ISO 9227 -1440 hours -C5H



80 Micron Plate after IM3 - 4000 Hours Salt water immersion Test

Dollies then removed using DeFelsko AT-CM Adhesion Tester Pressure Gauge, in accordance with **ASTM D7234:19**

RESULTS



Dolly 1 - 7.4 MPa



Dolly 2 - 9.8 MPa



Dolly 3 - 8.6 MPa



Dolly 4 - 9.8 MPa



Dolly 5 - 8.7 MPa



Average - 8.86 MPa