



Raven 541

Technical Data Sheet

MANUFACTURER

Raven Lining Systems
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DESCRIPTION

Raven 541 is a 100% solid. Self-leveling, fast cure polyurea coating designed for a quick turnaround elastomeric floor. Raven 541 can be used as a balcony waterproofing base coat or a non-slip membrane with the addition of an aggregate. Topcoats are generally recommended to "lock-in" the aggregate and for UV stability. Recommended topcoats are

Raven 520, Raven 545, or Raven 547 (for chlorinated areas)

PHYSICAL PROPERTIES (Typical)

Description	Method	Result
Tensile Strength	ASTM D412/ 638	1,250Psi
Elongation	ASTM D412/ 638	632%
100% Modulus	ASTM D412/638	464Psi
300% Modulus	ASTM D412/638	616 psi
Taber Abrasion, CS-17 wheel	ASTM D4060	<15
Die "C" Tear	ASTM D624	291pli
NSF/ANSI- 61	ASTM D624	No
Hardness, Shore A	ASTM D2240	75
Hardness, Shore D	ASTM 2240	30
Viscosity A-side (75°F)	Brookfield	2500
Viscosity B-side (75°F)	Brookfield	400-600
Volume Ratio	A;B	1A to 1B
Processing Properties:	Units	Result
Gel Time	Minutes	10
Tack Free Time	Minutes	40
Recoat Time	Hours	0-24
Full Cure	Days	7

TYPICAL USES

- Pedestrian Balcony Decks- Wood, Concrete, Steel
- "Soft Feel" Flooring Membrane
- Sidewalks
- Corrosion Protection for Steel or Concrete
- Concrete Waterproofing
- Light Duty Traffic Deck Membrane

COLOR

Standard Colors:

- Gray (In-Stock), Several others on request

APPLICATION

Raven 541 has been formulated as a fast cure membrane. A drill with minimum 3" mixer capable of turning 550 rpm and plenty of standard 1/8-inch "low fuzz" paint rollers. Raven Linings recommends the use of rubber granules for non slip. Contact Raven for specific recommendations.

SURFACE PREPARATION

Raven 541 adheres well to properly prepared substrates such as steel, aluminum, wood, concrete. Some substrates exhibit much better long term performance if a primer is used prior to application. Contact Raven for primer advice for various substrates.

Raven 541 should be mixed for 30-60 seconds and then poured immediately poured out of the container. Roll to desired film thickness quickly (within 5 minutes) for best results. Additionally, it is best to wait at least 15min after mixing to apply rubber to broadcast rubber granules to avoid "sinking" of the granules into the granules into the membrane. Broadcasting is best achieved using a standard "hopper" gun

CLEAN UP

Cured product may be disposed of without restriction. The un-cured isocyanate and resin portions should be mixed together and disposed of in a normal manner. "Drip free" containers should be disposed of according to state, local, and federal laws.

SAFETY

Consult the Material Safety Data Sheet for this product concerning health and safety information before using. Strictly follow all notices on the Material Safety Data Sheet and container label. If you do not fully understand the notices and procedures provided on the MSDS or if you cannot strictly comply with them, do not use this product. Actual safety measures are dependent on application methods and work environment. Keep uncured product away from children at all times. Contact Raven Lining Systems to obtain a copy of the Material Safety Data Sheet at 800-324-2810.

SHELF LIFE AND STORAGE

The product can be stored for six months in factory delivered, unopened drums. Keep away from extreme heat, freezing, and moisture. Proper storage temperature is between 60°F and 80°F. Ideal material storage temperature is

Raven 541 Polyurea Membrane

between 60°F and 95°F. It is recommended to warm the material to 80°F in the drum prior to spraying.

NSF/ANSI 61 PROCEDURES/REQUIREMENTS

Maximum Dry Film Thickness Allowed 120 mils
Return to Service Time (@ 72° F) 72 Hrs

*Coating must cure for 72 Hrs at ambient temp prior to use

Required Rinse Yes

*Coating should be rinsed after 72 Hrs cure

Consult the NSF website (www.nsf.org) for full certification parameters

LIMITATIONS

Raven 541 is an aromatic polyurea. While the physical properties may not be affected, the elastomer could fade with exposure to UV light or mercury vapor light. If color stability is mandatory, contact the manufacturer for recommendations. The chemical resistance chart should be consulted prior to application. Each individual user should check the product compatibility with their own application requirements prior to use.

AVAILABLE PACKAGES

Raven 541 is available in "ready to use" kits of 1.5 gallons

CHEMICAL RESISTANCE

Test Method	ASTM D 3912 M	24 Hour Spot
<u>Chemical</u>		<u>Result (25°C)</u>
Acetone		C
Brake Fluid (DOT3)		RC
Clorox® (10%)/Water		R
Diesel Fuel		R
Gasoline		R
Hydraulic Fluid (oil)		RC
Methyl Ethyl Ketone (M.E.K.)		N
Motor Oil		R
Muriatic Acid (31.45%)		R
NaCl/Water (10%)		R
Potassium Hydroxide (10%)		R
Sodium Hydroxide (10%)		R
Sodium Bicarbonate		R
Sugar/Water (10%)		R
Sulfuric Acid (10%)		R,Dis
Sulfuric Acid (<22%)		R
Sodium Hydroxide w/w (30%)		R
Transmission Fluid		R
Vinegar (5%)/Water		R
Water		R
Xylene		RC
UV Light (Sunlight)		Dis

R = Recommend = Little or no Visible Damage

RC = Recommend Conditional = Some Effect-Swelling,

C = Conditional = Poss. Cracking—Wash Down Within 1 Hour

NR = Not Recommended

Dis = Discoloration Only

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