



SHERWIN-WILLIAMS®
Automotive Finishes

Genesis® Polyurea
Polyurea - Black
PB4301

PRODUCT OVERVIEW

Genesis® Polyurea is a 100% solids spray applied, aromatic Polyurea hybrid coating system. PB4301 can be applied at a thickness of 30 – 125 mils during a single application and its fast cure time results in fast production times. The Genesis® Polyurea coating is impact, tear and abrasion resistant, flexible and waterproof and is 100% solid. Available as a factory packaged black, this has been designed for large surface area projects such as tank liners, trailers, and utility bodies.

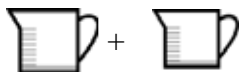


SUITABLE SUBSTRATES

- Blasted Metal
- Primed Metal (Prime with Genesis® Low VOC Urethane Primers, E2A819, E2W817, E2B818)
- Primed Wood (Prime with Genesis® Low VOC Urethane Primers, E2A819, E2W817, E2B818)



Components



1 Part
PB4301
Polyurea -
Black

1 Part
PH4301
Hardener



APPLICATION

- Clean Surface as stated in Surface Preparation of the data sheet.
- Agitate PB4301 thoroughly before use.
 - Do not thin
 - Do not hand mix PB4301 with PH4301 Hardener (To be combined in Reactors Only)
 - Do not over agitate to prevent introduction of air and moisture.
- When priming metal or wood substrates, prime with Genesis® Low VOC Urethane Primer (E2A819, E2W817, E2B818).
- Apply topcoat to primed surface after 20 seconds or within 1 hour. After 1 hour, sand with 220/180 grit before applying Genesis® Polyurea.

DRYING SCHEDULE

Drying Schedule was tested by @ 30.0 mils wet and 50% RH @ 73° F

To touch: 20 seconds
To recoat:
Minimum: 20 seconds
Maximum: 16 hours
Gel time: 10 seconds
Tack Free: 20 seconds
Foot traffic: 2 hours
To cure: 24 hours



PERSONAL PROTECTION

- Read all label directions before use.
- Refer to MSDS for specific information.
- Wear positive-air respirator when mixing and applying.
- Wear a NIOSH approved dust particulate mask when sanding.
- Wear safety goggles, coveralls, and latex gloves when using product.



PRODUCT DATA SHEET



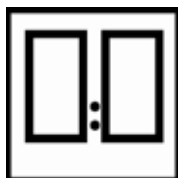
SURFACE PREPARATION

- Remove all oil, dust, grease, dirt, loose rust and other foreign material to ensure adequate adhesion.
- Surface must be clean. Clean with Sherwin-Williams® Low VOC Surface Cleaner W4K157 and wipe dry with a clean cloth.
- Preparation Standards Steel:
 - For direct to metal application, abrasive blast or sand blast, SSPC-SP10/NACE 2, 2 mil profile.
- Wood or metal primed with Sherwin-Williams® Low VOC Urethane Primer (E2A819, E2W817, E2B818, E2N816).

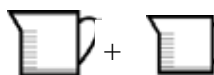


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Application Conditions

Temperature:

Material: 150° F minimum, 170° F maximum

Air and Surface: -20° F minimum, 120° F maximum
At least 5 F above dew point

Relative humidity: 80% maximum

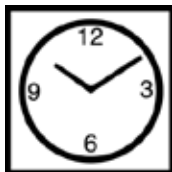
Equipment

Plural Component Heated Spray Equipment

Equipment	Graco Reactor EXP2 or HXP3
Gun	GX7 DI, GX7-400, or GX-8
Fluid Pressure @ Gun	2200 psi
Air Pressure	100 psi
A Side Temperature	150 – 170 F
B Side Temperature	150 – 170 F
Inlet Strainer Screen	30 Mesh
Gun Screen	80 Mesh



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To cure: 24 hours

Note: If maximum recoat time is exceeded, abrade surface with 220/180 grit sandpaper before recoating.
Drying time is temperature, humidity, and film thickness dependent.



TECHNICAL DATA

Max VOC @ 1:1 ASTM D2369	0 lbs/gal	Reducer	Not Recommended
Ready to Spray Volume Solids (Color)	100%	Sweat – in Time	None
Viscosity (mixed)	550 cps	Pot Life	None
Coverage	1604 FT ² /gal mill	Shelf Life	12 months, unopened Store indoors at 70° F to 90° F
Recommended Wet Film Thickness	30 – 125.0 mils	Flash Point	200° F
Recommended Dry Film Thickness	30 – 125.0 mils		

Physical Properties	Results		Results
Abrasion Resistance Method: ASTM D4060, CS17 Wheel, 1000 cycles, 1 kg load	11 mg loss	Mandrel Bend Method: ASTM D522 conical bend(1/32" steel panel)	Passes
Adhesion Method: ASTM D4541	Steel -1500 psi, Wood - 250 psi	Tear Strength Method: ASTM D638	400 pli
Cracking Bridging (@ -15° F @ 1/16") Method: ASTM C836	Passes	Tensile Elongation Method: ASTM D638	170%
Durometer Hardness Method: ASTM D2240	Shore D-55	Tensile Modulus Method: ASTM D 638	100% modulus – 1,200 psi 300% modulus – 2,000 psi
Gardner Impact Method: ASTM D2794 (1/32" Steel panel)	>160 in-lbs, direct & indirect	Tensile Strength Method: ASTM D638	2,400 psi



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LABEL CAUTION INFORMATION

Intended Use: Automotive Aftermarket

DANGER!

HARMFUL IF INHALED OR ABSORBED THROUGH THE SKIN.

MAY CAUSE ALLERGIC RESPIRATORY AND SKIN REACTIONS.

CAUSES EYE, SKIN AND RESPIRATORY TRACT BURNS.

Before using, carefully read **CAUTIONS** on back panel.

CAUTIONS

SEE CONTENTS STATEMENT ELSEWHERE ON LABEL.

Use only with adequate ventilation. To avoid overexposure, open windows and doors or use other means to ensure fresh air entry during

application and drying. If you experience eye watering, headaches, or dizziness, increase fresh air, or wear respiratory protection (NIOSH

approved) or leave the area.

Avoid contact with eyes and skin. Wash hands after using. Keep container closed when not in use. Do not transfer contents to other containers

for storage.

FIRST AID: In case of eye contact, flush thoroughly with large amounts of water. Get medical attention if irritation persists. If swallowed, call

Poison Control Center, hospital emergency room, or physician immediately.

This product must be mixed with other components before use. Before opening the packages, **READ AND FOLLOW**

WARNING LABELS ON

ALL COMPONENTS.

WARNING: This product contains chemicals known to the State of California to cause cancer.

DO NOT TAKE INTERNALLY. KEEP OUT OF THE REACH OF CHILDREN.

FOR PROFESSIONAL USE ONLY.

SEE MATERIAL SAFETY DATA SHEET.

To learn more about Sherwin-Williams® Automotive Refinish Products, visit our Web site at www.sherwin-automotive.com

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