



HIGH
PERFORMANCE
FLOORING

RESUTILE™ 4638 HS POLYURETHANE FLOOR ENAMEL

PART A	GP4638A01	CLEAR
PART A	GP4638W01	WHITE TINT BASE
PART A	GP4638T04	ULTRADEEP TINT BASE
PART B	GP4638B01	STANDARD HARDENER

Revised: December 9, 2022

PRODUCT INFORMATION

PRODUCT DESCRIPTION

RESUTILE 4638 HS Polyurethane Enamel is a tough, high-gloss, durable finish used as a stand-alone coating system or an optional topcoat over other Sherwin-Williams high-build flooring systems. Resutile 4638 is formulated to meet the tight VOC restrictions imposed by many states. It resists UV degradation, certain aggressive chemicals and possesses superior gloss retention.

ADVANTAGES

- Outstanding resistance to a wide range of chemical, weather and mechanical conditions
- Excellent wear
- High gloss retention
- UV (Ultraviolet) light stable
- Abrasion and impact resistant
- Suitable for use in USDA inspected facilities
- Auto service centers, airport hangars
- Skydrol resistant

TYPICAL USES

RESUTILE 4638 HS Polyurethane Enamel is designed as a finish coat on flooring systems used in warehouses, commercial facilities, aircraft hangars, automobile dealerships and pharmaceutical facilities.

LIMITATIONS

- Urethanes are sensitive to environmental conditions
- Slab on grade requires vapor/moisture barrier
- Substrate must be structurally sound and free of bond inhibiting contaminants
- During installation and initial cure cycle, substrate and ambient air temperature must be at a minimum of 60°F (16°C) and 90°F (32°C) maximum. Substrate temperature must be at least 5°F (3°C) above the dew point (for lower temperature installation contact your Sherwin-Williams representative).
- When required, adequate ventilation shall be provided and proper clothing and respirators worn
- Do not premix Part B hardener
- Humidity must not exceed 80%
- Do not install in open areas during rain
- **Strictly adhere to published coverage rates**
- **This coating though resistant, is not a guarantee against tire staining. Vehicular tires from cars and trucks to tractors and boat trailers are varied and have the potential to leave a stain under certain conditions. Place rubber mats or carpet pieces under the tires to avoid the issue.**

SURFACE PREPARATION

Proper inspection and preparation of the substrate to receive resinous material is critical. Read and follow the "Instructions for Concrete Surface Preparation" (Form G-1) for complete details.

PRODUCT CHARACTERISTICS

Color:	Clear and a wide range of custom colors Tintable: GP4638W01 (white tint base) and GP4638T04 (ultra-deep tint base) ONLY See page 2 for additional tint details.
Mix Ratio:	2:1
Volume Solids:	71% ± 2%, mixed
Weight Solids:	90% ± 2%, mixed
VOC (EPA Method 24):	<250 g/L; 2.1 lb/gal, mixed
Viscosity, mixed:	1,500 cps

Recommended Spreading Rate per coat:			
	Minimum	Maximum	
Wet mils (microns):	3 (75)	4.5	(112)
~Coverage sq ft/gal (m²/L):	355 (9.0)	533	(13.5)

Drying Schedule @ 4 mils (100 microns) wet:

	@ 73°F (23°C)
To touch:	2 hours
To recoat:	6-24 hours
Light foot traffic:	12 hours
Heavy traffic:	72 hours
Full Cure:	7 days

*If maximum recoat time is exceeded, abrade surface before recoating.
Drying time is temperature, humidity, and film thickness dependent.*

Pot Life:	gallon mass	4 hours	@ 73°F (23°C)
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Shelf Life:	Part A: 36 months, unopened Part B: 24 months, unopened Store indoors at 50°F (10°C) to 90°F (32°C)
Flash Point:	102°F (39°C), ASTM D 93, mixed
Reducer*:	VOC Restricted Areas (<250 g/L): Reduction not recommended
Clean Up:	Reducer R6K30 or R7K225

*Other areas (<340 g/L): Reducer R6K30 or R7K225 up to 5% by volume. Choose a reducer that is compliant in your area. Confirm compliance with state and local air quality rules before use.

PERFORMANCE CHARACTERISTICS

Test Name	Test Method	Results
Abrasion Resistance	ASTM D4060, CS17 wheel, 1000 cycles	63 mg loss
Adhesion	ACI503R	350 psi concrete failure
Coefficient of Friction	ASTM F 1679	0.5 min dry 0.6 dry with Shark Grip Additive
Flammability		Self-extinguishing over concrete
Gloss @ 73°F/23°C, 50%RH	60° Gloss Meter	85 millage units
Impact Resistance	ASTM D2794	Direct inch-pound greater than 100, passes Reverse, inch-pound greater than 100, passes
Pencil Hardness	ASTM D 3363	2H
Resistance to Elevated Temperature	MIL-D-3134J	No slip or flow at required temperature of 158°F (70°C)

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APPLICATION

APPLICATION INSTRUCTIONS:

Recommended Primers (for concrete):
Resuprime 3504 and Resuprime 3579

Recommended Primers (for tile):
Resuprime 5531 with Resuprime 3504

1. Premix 4638A (resin) using a low speed drill and Jiffy blade. Mix for one minute and until uniform, exercising caution not to introduce air into the material.

2. Add 2 parts 4638A (resin) to 1 part 4638B (hardener) by volume. Mix with low speed drill and Jiffy blade for three minutes and until uniform. To insure proper system cure and performance, strictly follow mix ratio recommendations.

3. Apply 4638 using a 1/4" nap roller at a spread rate of 355-533 square feet per gallon, evenly, with no puddles making sure of uniform coverage. **Take care not to puddle materials and insure even coverage.**

4. Allow to cure 12 hours minimum before opening to light foot traffic.

Reduction:
VOC Restricted Areas (<250 g/L): Reduction not recommended

Other areas (<340 g/L): Reducer R6K30 or R7K225 up to 5% by volume. Choose a reducer that is compliant in your area. Confirm compliance with state and local air quality rules before use.

Excessive reduction of material can affect film build, appearance and possibly cause color float.

ORDERING INFORMATION

Packaging:	
Part A:	1 gallon (3.8L) and 5 gallon (18.9L) containers
Part B:	1 gallon (3.8L) containers 5 gallons (18.9L) containers
Weight:	10.0 ± 0.2 lb/gal; 1.20 Kg/L mixed, may vary by color

CHEMICAL RESISTANCE

For comprehensive chemical resistance information, consult the Chemical Resistant Guide and contact your Sherwin-Williams representative.

TINTING

Can be tinted with HPF Universal colorants. For Universal colorants, use one pint per 1-gallon mix of GP4638A01 (Clear) for most colors. White, Bright Yellow, Light Gray, Sandy Beige and Rotunda Red will not impart total hide. Similar colorants also may not hide as well.

CLEANUP

Clean spills and splatters immediately with Reducer R6K30 or R7K225. Clean tools immediately after use with Reducer R6K30 or R7K225. Follow manufacturer's safety recommendations when using any solvent.

SAFETY

Refer to the SDS sheet before use.

Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.

MAINTENANCE

Occasional inspection of the installed material and spot repair can prolong system life. For specific information, contact your Sherwin-Williams representative.

For all guidelines on concrete surface preparation, please reach out to your high performance flooring tech service rep or sales representative. Refer to Form G-1.

DISCLAIMER

The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of The Sherwin-Williams Company. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult your Sherwin-Williams representative to obtain the most recent Product Data Information and Application Bulletin.

WARRANTY

The Sherwin-Williams Company warrants our products to be free of manufacturing defects in accord with applicable Sherwin-Williams quality control procedures. Liability for products proven defective, if any, is limited to replacement of the defective product or the refund of the purchase price paid for the defective product as determined by Sherwin-Williams. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY SHERWIN-WILLIAMS, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.