

PITTHANE® ULTRA / SIGMADUR™ 550 US

95-812 Series

DESCRIPTION

Two-component, gloss acrylic aliphatic urethane

PRINCIPAL CHARACTERISTICS

- High gloss topcoat with unlimited recoatability
- Outstanding weather resistance with excellent color and gloss retention
- VOC compliant for 2.08 VOC requirements
- Tough, flexible and abrasion resistant

COLOR AND GLOSS LEVEL

- Standard Color Offering, Safety Colors, Custom Colors
- Gloss

BASIC DATA AT 20°C (68°F)

Data for mixed product	
Number of components	Two
Volume solids	70 ± 3%
VOC (Supplied)	max. 2.0 lb/US gal (approx. 241 g/l)
Temperature resistance (Continuous)	To 250°F (121°C)
Temperature resistance (Intermittent)	To 300°F (149°C)
Recommended dry film thickness	2.0 - 3.0 mils (50 - 75 µm) depending on system
Theoretical spreading rate	561 ft ² /US gal for 2.0 mils (14.0 m ² /l for 50 µm)
Shelf life	Base: at least 36 months when stored cool and dry Hardener: at least 36 months when stored cool and dry

Notes:

- See ADDITIONAL DATA – Overcoating intervals
- See ADDITIONAL DATA – Curing time
- Discoloration will occur at high temperatures

RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

- Coating performance is proportional to the degree of surface preparation. Refer to the application instructions for specific primers and intermediate coats for application and curing procedures. Ensure epoxies are free from amine blush prior to overcoating. All previous coats must dry and free of contaminants. Adhere to all minimum and maximum topcoat times for specific primers and intermediate coats. Aged epoxy coatings require abrading prior to applying the product. A test patch over unknown coatings is recommended.



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95-812 Series

Substrate temperature and application conditions

- Surface temperature during application should be between 20°F (-7°C) and 140°F (60°C)
 - Surface temperature during application should be at least 5°F (3°C) above dew point
 - Ambient temperature during application and curing should be between 20°F (-7°C) and 100°F (38°C)
 - Relative humidity during application should not exceed 85%
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SYSTEM SPECIFICATION

- Primers: 97-145, 97-946, 97-680, 97-670, DURETHANE MCZ, AMERCOAT 68HS, AMERCOAT 68MCZ, AMERCOAT 370, AMERCOAT 385, AMERLOCK 2/400, AMERCOAT 399

Notes:

- 2 coats may be required to achieve proper thickness
 - A minimum application of 4.0 mils (100 µm) dry film thickness is recommended over zinc primers
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INSTRUCTIONS FOR USE

Mixing ratio by volume: base to hardener 5:1

- Pre-mix pigmented components with a pneumatic air mixer at moderate speeds to homogenize the container. Add hardener to base and agitate with a power mixer for 1-2 minutes until completely dispersed
 - Mix using a power mixer at low speed for 1 - 2 minutes being careful not to whip air bubbles into the product
 - For clear coats, allow bubbles to escape from the surface for a few minutes prior to application and spray a test area to ensure the film is clear
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Application

- Area should be sheltered from airborne particulates and pollutants
 - Ensure good ventilation during application and curing
 - Provide shelter to prevent wind from affecting spray patterns
 - Protect from moisture until dry through time is reached
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Material temperature

- Material temperature during application should be between 40°F (4°C) and 90°F (32°C)
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Pot life

3 hours at 70°F (21°C)

Note:

- See ADDITIONAL DATA – Pot life
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95-812 Series

Air spray

- Use standard conventional equipment
- A moisture and oil trap in the main line is essential. Product is sensitive to moisture contamination

Recommended thinner

THINNER 21-85 (97-739 THINNER), THINNER 21-06 (97-727 THINNER or AMERCOAT 65), or THINNER 21-25 (AMERCOAT 101) is recommended for > 90°F (32°C)

Volume of thinner

0 - 15%

Nozzle orifice

Approx. 0.070 in (1.8 mm)

Airless spray

- 28:1 pump or larger

Recommended thinner

THINNER 21-85 (97-739 THINNER), THINNER 21-06 (97-727 THINNER or AMERCOAT 65), or THINNER 21-25 (AMERCOAT 101) is recommended for > 90°F (32°C)

Volume of thinner

0 - 10%

Nozzle orifice

0.013 – 0.015 in (approx. 0.33 – 0.38 mm)

Brush/roller

- Use a high quality natural bristle brush and/or solvent resistant, 1/4" or 3/8" nap roller. Ensure brush/roller is well loaded to avoid air entrainment. Multiple coats may be necessary to achieve adequate film-build
- AMERCOAT 851 flow control additive can be used to for enhanced flow and leveling with brush and roll application

Recommended thinner

THINNER 21-85 (97-739 THINNER), THINNER 21-06 (97-727 THINNER or AMERCOAT 65), or THINNER 21-25 (AMERCOAT 101) is recommended for > 90°F (32°C)

Volume of thinner

0 – 5%

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95-812 Series

Cleaning solvent

- THINNER 90-58 (AMERCOAT 12)
- THINNER 21-06 (97-727)

ADDITIONAL DATA

Overcoating interval for DFT up to 2.0 mils (50 µm)

Overcoating with...	Interval	20°F (-7°C)	30°F (-1°C)	40°F (4°C)	50°F (10°C)	70°F (21°C)	90°F (32°C)
itself	Minimum	N/A	24 hours	18 hours	12 hours	5 hours	2.5 hours
	Maximum	N/A	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited

Overcoating interval with 97-722 accelerator or AMERCOAT 866 M accelerator for DFT up to 2.0 mils (50 µm)

Overcoating with...	Interval	20°F (-7°C)	35°F (2°C)	50°F (10°C)	70°F (21°C)	90°F (32°C)
itself	Minimum	32 hours	8 hours	2 hours	40 hours	25 hours
	Maximum	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited

Curing time for DFT up to 2.0 mils (50 µm)

Substrate temperature	Dry to touch	Dry to handle
50°F (10°C)	6 hours	12 hours
70°F (21°C)	2.5 hours	5 hours
90°F (32°C)	1.5 hours	2.5 hours

Curing time with 97-722 accelerator or AMERCOAT 866 M accelerator for DFT up to 2.0 mils (50 µm)

Substrate temperature	Dry to touch	Dry to handle
20°F (-7°C)	8 hours	32 hours
35°F (2°C)	3 hours	8 hours
50°F (10°C)	1 hour	2 hours
70°F (21°C)	20 minutes	40 minutes
90°F (32°C)	15 minutes	25 minutes



PITTHANE® ULTRA / SIGMADUR™ 550 US

95-812 Series

Pot life (at application viscosity)	
Mixed product temperature	Pot life
50°F (10°C)	5 hours
70°F (21°C)	3 hours
90°F (32°C)	1.5 hours

Pot life (at application viscosity): with 97-722 or AMERCOAT 866 M accelerator	
Mixed product temperature	Pot life
20°F (-7°C)	4 hours
32°F (0°C)	3 hours
40°F (4°C)	2 hours
50°F (10°C)	1.5 hours
70°F (21°C)	1 hour
90°F (32°C)	30 minutes

Product Qualifications

- SSPC Paint 36 Level 3 Performance
- MPI #78 (neutral base)
- MPI #83 (2 component urethane non-slip)
- Compliant with USDA Incidental Food Contact Requirements

DISCLAIMER

- For industrial or professional use only



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SAFETY PRECAUTIONS

- **WARNING:** Removal of old paint by sanding, scraping or other means may generate dust or fumes which contain lead. EXPOSURE TO LEAD DUST OR FUMES MAY CAUSE ADVERSE HEALTH EFFECTS, ESPECIALLY IN CHILDREN OR PREGNANT WOMEN. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted and approved (e.g., NIOSH approved) respirator and proper containment and cleanup. For additional information, contact the USEPA/Lead Information Hotline at 1-800-424-LEAD or the regional Health Canada office
- See Safety Data Sheet and product label for complete safety and precaution requirements
- This is a solvent-borne paint and care should be taken to avoid inhalation of spray mist or vapor, as well as contact between the wet paint and exposed skin or eyes

Danger

Rags, steel wool or waste soaked with this product may spontaneously catch fire if improperly discarded. Immediately after use, place rags, steel wool or waste in a sealed water-filled metal container. Refer to www.pittsburghpaints.com, Spontaneous Combustion Advisory for additional information

WORLDWIDE AVAILABILITY

It is always the aim of PPG Protective & Marine Coatings to supply the same product on a worldwide basis. However, slight modification of the product is sometimes necessary to comply with local or national rules/circumstances. Under these circumstances an alternative product data sheet is used.

REFERENCES

- Information sheet | Explanation of product data sheets

WARRANTY

PPG warrants (i) its title to the product, (ii) that the quality of the product conforms to PPG's specifications for such product in effect at the time of manufacture and (iii) that the product shall be delivered free of the rightful claim of any third person for infringement of any U.S. patent covering the product. THESE ARE THE ONLY WARRANTIES THAT PPG MAKES AND ALL OTHER EXPRESS OR IMPLIED WARRANTIES, UNDER STATUTE OR ARISING OTHERWISE IN LAW, FROM A COURSE OF DEALING OR USAGE OF TRADE, INCLUDING WITHOUT LIMITATION, ANY OTHER WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR USE, ARE DISCLAIMED BY PPG. Any claim under this warranty must be made by Buyer to PPG in writing within five (5) days of Buyer's discovery of the claimed defect, but in no event later than the expiration of the applicable shelf life of the product, or one year from the date of the delivery of the product to the Buyer, whichever is earlier. Buyer's failure to notify PPG of such non-conformance as required herein shall bar Buyer from recovery under this warranty.

LIMITATIONS OF LIABILITY

IN NO EVENT WILL PPG BE LIABLE UNDER ANY THEORY OF RECOVERY (WHETHER BASED ON NEGLIGENCE OF ANY KIND, STRICT LIABILITY OR TORT) FOR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES IN ANY WAY RELATED TO, ARISING FROM, OR RESULTING FROM ANY USE MADE OF THE PRODUCT. The information in this sheet is intended for guidance only and is based upon laboratory tests that PPG believes to be reliable. PPG may modify the information contained herein at any time as a result of practical experience and continuous product development. All recommendations or suggestions relating to the use of the PPG product, whether in technical documentation, or in response to a specific inquiry, or otherwise, are based on data, which to the best of PPG's knowledge, is reliable. The product and related information is designed for users having the requisite knowledge and industrial skills in the industry and it is the end-user's responsibility to determine the suitability of the product for its own particular use and it shall be deemed that Buyer has done so, as its sole discretion and risk. PPG has no control over either the quality or condition of the substrate, or the many factors affecting the use and application of the product. Therefore, PPG does not accept any liability arising from any loss, injury or damage resulting from such use or the contents of this information (unless there are written agreements stating otherwise). Variations in the application environment, changes in procedures of use, or extrapolation of data may cause unsatisfactory results. This sheet supersedes all previous versions and it is the Buyer's responsibility to ensure that this information is current prior to using the product. Current sheets for all PPG Protective & Marine Coatings Products are maintained at www.ppgpmc.com. The English text of this sheet shall prevail over any translation thereof.

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95-812 Series

AVAILABILITY OF PACKAGING

Packaging

- 1-gallon and 5-gallon kits

Depending on specific country of application the following versions are available:

Product	Color
95-812	Porcelain White
95-805	Safety Orange
UC87112	H&P Gray
95-8002	Yellow Base
95-802	Safety Yellow
95-801	Safety Red
95-812	Porcelain White
95-819	Hardener
95-8003	Red Base
95-8000	Neutral Base
95-814	Black
95-8001	White Base
95-802	Safety Yellow
95-819	Hardener

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