



Product Finishes

PermaSwade 9411

GRIP F63VC0508

PRODUCT DESCRIPTION

PermaSwade 9411 Grip is a two component water based urethane technology designed to give a grip feel to various plastics.

Advantages

- Low odor/Low VOC
- Apply using conventional or HVLP spray methods.
- Free of lead and chrome.
- Adheres directly to ABS, PC-ABS, B1000.
- Excellent appearance over metal or plastic.
- Maximum 4 ounces of Kem Aqua® Colorants can be used to make transparent colors.
- Can be used as a topcoat over metallic or pigmented Kem Aqua® Colorline EP, Kem Aqua® 600, Polane® G Plus and Acrylic Lacquer EP®.

*VOC compliance limits vary from state to state; please consult local Air Quality rules and regulations.

CHARACTERISTICS

Density : 8.53 lbs/gal
pH : 8.3 - 8.7

Volatile Organic Compounds (VOC)
as packaged 1.38 lb/gal, 165.4 g/L
Catalyzed : 1.23 lb/gal, 147.2 g/L

Gloss at 60°: 5 maximum
Volume Solids: 28.28 ± 1%
Weight Solids: 29.26 ± 1%
Viscosity: (agitated)
60-67 Krebs Units at 25° C (77° F)
Zahn #3 17-23 sec

Recommended Film Thickness:

Dry: 1.0 – 1.3 mils
Wet: 3.9 – 4.6 mils

Spreading Rate: Catalyzed
506 sq. ft./gal. At 1.0 mil DFT

Flash Point: 230° F

CHARACTERISTICS (Cont.)

Mixing Ratio: (by volume)

20 Part A F63VC508
1 Part B V66VC507
Should be mixed mechanically (air mixer) low speed for at least three minutes.

Pot Life : 4 Hours

Package Life: 12 Months unopened

Good air movement and humidity control is necessary for proper drying of water reducible coatings.

An Environmental Data Sheet is available from your local Sherwin-Williams facility.

SPECIFICATIONS

Plastics: Due to the diverse nature of plastic substrates, a coating or coating system must be tested for acceptable adhesion to the substrate prior to use in production. Reground and recycled plastics along with various fire retardants, flowing agents, mold release agents, and foaming/blowing agents will affect coating adhesion. A filler or primer/barrier coat may be required. Please consult your Sherwin-Williams Product Finishes Sales Representative for system recommendations.

Metal: Consult Metal Preparation Brochure CC-T1 for additional details.

Testing: Due to the wide variety of substrates, surface preparation methods, application methods, and environments, the customer should test the complete system for adhesion, compatibility and performance prior to full scale application.

Application

Typical Setups

May be applied by:
Conventional Spray
HVLP

Conventional Spray:

Air Pressure 45 - 55 psi
Fluid Pressure 10 - 15 psi
Tip 0.055 – 0.070 in
Reduction rate up to 5 % with water

HVLP:

Air Pressure at the cap 10 psi max
Fluid Pressure 6 - 10 psi
Tip 0.055 – 0.070 in
Reduction Rate up to 5% with water

Drying: (Room Temperature)

To Touch 45 minutes
Tack Free 60 minutes
To handle 75 minutes
Recoat 30-60 minutes

Baking Schedule: 15 min flash
30 min at 180° F

Cleanup:

Clean tools/equipment immediately after use with water.

SPECIFICATIONS

Product Limitations:

- Avoid Freezing. Store at temperatures of 50 °F to 100 °F.
- Do not apply with electrostatic bell or turbodisk
- Not intended for long term exterior applications.
- The practical upper limit for gloss is 5 units. PermaSwade 9411 Grip is not a high gloss coating.
- Kem Aqua® Colorants are not to exceed 4 ounces per gallon.
- Effect pigments not to exceed 1%

Performance Tests

Adhesion to substrate:	
ABS	Excellent
PC-ABS	Excellent
Acrylic	Excellent
B1000 P99X	Excellent
Aluminum	Excellent

Eraser Test	Failure
Mar resistance	Failure
50 Double MEK Rubs	Failure
Double IPA Rubs	Good

Chemical Resistance (30 minutes covered spot test)

Lipids	Good
Catsup	Excellent
Cola	Excellent
Lipstick	Stain
Formula 409	Good
Pledge	Excellent
Hand Cream	Excellent
Margarine	Excellent
Saliva	Excellent
10% HCl	Excellent
Lemon Juice	Excellent
Artificial Perspiration	Excellent
Anti-Static Cleaner	Excellent
Dish Soap	Excellent
Saturated Cleaner	Excellent
Household Ammonia	Excellent
Windex	Excellent
Spic & Span	Good
Ball Point Pen	Stain
70% IPA	Failure
Coffee	Stain
Tap Water	Excellent
Citrus Based Cleaner	Excellent
Nivea Hand Lotion	Excellent

Chemical Resistance (24 hours covered spot test)

Ammonium Hydroxide	Excellent
IPA	Failure
Black Stamp Ink	Excellent
Banana Boat	Failure
Acetone	Good
Tea	Good
Cola	Excellent
Wax Pencil	Good
Formula 409	Good
Liquid Detergent 50%	Good
Mustard	Good
Ethanol	Failure
Lipids	Failure
Felt Tip Pen	Failure

Environmental Testing

Thermal Cycling: High and low test extremes
High 66° C, 75% RH(72 hrs)
Low 25° C, 50% RH
No Effect

CAUTIONS

Thoroughly review product label for safety and cautions prior to using this product. A Material Safety Data Sheet is available from your local Sherwin-Williams facility. Please direct any questions or comments to your local Sherwin-Williams facility.

Catalyst CONTAINS ISOCYANATES. People who have chronic (long-term) lung or breathing problems or have had a reaction to isocyanates, must not be in the area where this product is being applied. Where overspray is present, a positive pressure air-supplied respirator should be worn. If unavailable, a properly fitted organic vapor/particulate respirator may be effective. Consult catalyst MSDS and product label for complete handling instructions.

Note: Product Data Sheets are periodically updated to reflect new information relating to the product. It is important that the customer obtain the most recent Product Data Sheet for the product being used. The information, rating, and opinions stated here pertain to the material currently offered and represent the results of tests believed to be reliable. However, due to variations in customer handling and methods of application, which are not known or under our control, The Sherwin-Williams Company cannot make any warranties as to the end result.

Chicago-AWSTC
LEM 10/2013