ALIPHATIC ACRYLIC URETHANE
SEMI-GLOSS V510

Features
- Resistant to hydraulic fluid
- Outstanding UV protection
- High chemical and abrasion resistance
- Suitable for use in USDA inspected facilities
- Excellent anti-graffiti coating

General Description
Aliphatic Acrylic Urethane is a multi-use, two-component urethane appropriate for use on both metal and masonry. This product provides excellent gloss and color retention when used on exterior surfaces exposed to sunlight and rain, and the highly cross-linked formula provides superior abrasion, chemical, and solvent resistance. Due to these outstanding features, urethanes are often used as the final layer in a multi-layer system on steel or masonry. This is a two component product that requires 4 parts of the proper “A” component mixed with 1 part of part “B” catalyst. The components are already premeasured to the proper mix ratio. No measuring required. Do not mix partial kits.

Recommended For

Limitations
- Do not apply if air or surface temperatures are below 50 °F (10 °C) or above 100 °F (37.7 °C) or in relative humidity levels greater than 85%.
- This product is not for immersion service.
- Coated surfaces may discolor under tires due to plasticizer migration.

Technical Data

<table>
<thead>
<tr>
<th>Color</th>
<th>Tintable White</th>
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</thead>
<tbody>
<tr>
<td>Generic Type</td>
<td>Aliphatic Acrylic Urethane</td>
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<tr>
<td>Pigment Type</td>
<td>Titanium Dioxide</td>
</tr>
<tr>
<td>Volume Solids (mixed as recommended)</td>
<td>61 ± 1.0%</td>
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<tr>
<td>Coverage per Gallon at Recommended Film Thickness</td>
<td>350 - 500 Sq. Ft.</td>
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<tr>
<td>Film Thickness Recommended</td>
<td>Wet</td>
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<tr>
<td>Film Thickness Dry</td>
<td>3.2 - 4.6 mils</td>
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<tr>
<td>Film Thickness Full</td>
<td>2.0 - 2.8 mils</td>
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</tbody>
</table>

Certification & Qualifications:
The products supported by this data sheet contain a maximum of 340 grams per liter VOC / VOS (2.83 lbs./gal.) excluding water & exempt solvents.

Master Painters Institute MPI # 83 & 174
Meets the Performance Requirements of Mil-C-85285
Suitable for Use in USDA Inspected Facilities

Technical Assistance:
Available through your local authorized independent Benjamin Moore retailer. For the location of the retailer nearest you, call 1-866-708-9180 or visit www.benjaminmoore.com

VOC REGION COMPLIANT
FEDERAL YES
OTC YES
OTCII NO
CARB NO
CARB07 NO
UTAH NO
AZMC YES
SCAQMD NO

VOC REGIONS
CARB NO
OTCII NO
UTAH NO
AZMC YES
SCAQMD NO

Do Not Thin
Clean Up Thinner Corotech® V700 Urethane Reducer
Mixed Ratio (by volume) 4 : 1
Induction time @ 70 °F (21 °C) 15 Minutes
Pot Life @ 77 °F (25 °C) 3 – 4 Hours
Weight Per Gallon (mixed as recommended) 10.6 lbs.
Storage Temperature Min. 40 °F Max. 90 °F

Volatile Organic Compounds (VOC)
302 Grams / Liter* 2.52 LBS / Gallon* Catalyzed

◊ Reported values are for Tintable White. Contact retailer for values of other bases or colors.
Aliphatic Acrylic Urethane Semi-Gloss V510

Surface Preparation

The performance of this product is directly dependent upon the degree of surface preparation employed. Removal of all contaminants should be completed in accordance with SSPC-SP 1 using Corotech® V600 Oil & Grease Emulsifier followed by specific preparation methods as indicated on primer data sheets. Rust and mill scale must be removed from carbon steel and iron substrates as outlined on specific primer data sheets. Surface to be coated must be clean, sound and dry. Fresh concrete must age at least thirty days before coating. All oil, grease, release agents, curing compounds, concrete hardeners, laitance and other contaminants must be removed before coating.

NEW SURFACES

Steel: Blast selection and choice of primer will be dependent on the severity of exposure and degree of protection required. Maximum protection will be attained using an SSPC-SP 10 Near White Metal Blast followed by 1 coat of Corotech® V150 Epoxy Primer or V160 Epoxy Mastic and 1 or 2 coats of Corotech® V510 Aliphatic Acrylic Urethane. Please contact your Corotech® representative or technical service for recommendations on less severe applications.

Concrete: All masonry surfaces must be allowed to cure a minimum of 30 days before painting. Acid etch or abrasive blast all slick, glazed concrete or concrete with laitance. For acid etching, follow all manufacturer directions and safety instructions. Corotech® V620 Concrete Etch is recommended. Rinse and neutralize thoroughly and allow to dry. Prime concrete with 1 coat Corotech® V155 Epoxy Pre-Primer followed by 1 coat of Corotech® V400 Polyamide Epoxy and a topcoat of Corotech® V510 Aliphatic Acrylic Urethane.

Galvanized and Non Ferrous Metals: Solvent clean all surfaces. Apply 1 coat of Corotech® V110 Acrylic Metal Primer or Corotech® V175 Waterborne Bonding Primer. Can also use most epoxy primer and intermediate coatings.

Previously Painted Surface: Can be applied over old thermostet finishes in good condition. Test patches are recommended to check for wrinkling or lifting of existing coatings. If lifting occurs, Corotech® V155 Pre-Primer may be used over all existing coatings as a barrier coat.

Fiberglass: Can be applied directly to clean, previously unpainted fiberglass. Scuff sand fiberglass to promote better adhesion.

WARNING! If you scrape, sand, or remove old paint, you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear a NIOSH approved respirator to control lead exposure. For more information, contact the National Lead Informational Hotline at 1-800-424-LEAD or log on to www.epa.gov/lead.

Application

Mix the “A” and “B” components thoroughly before mixing together. The use of a drill mixer at low speed will best accomplish this task. Add the full contents of the quart size “B” component to the “A” and thoroughly mix the two together. Allow 15 minutes @ 77 °F induction or “sweat-in” time (@ 77 °F) prior to applying the mixed product to the substrate. Do not apply Corotech® Aliphatic Acrylic Urethane if air or surface temperatures are below 50 °F or above 100 °F, or in relative humidity levels greater than 85%, or if surface or air temperatures are within 5 degrees of the dew point. Product should be allowed to dry tack free prior to air or surface temperatures being within 5 degrees of the dew point.

This product is formulated to be applied without thinning. If needed for application consistency, up to 2 ounces per gallon of Corotech® V700 Urethane Reducer may be added according to local regulations. Do not use VM&P Naphtha to thin this product. Where non-skid characteristics are desired, hand broadcast an appropriate anti-slip aggregate into the wet film then back-roll to encapsulate. Benjamin Moore’s Corotech® Anti-Slip Aggregate V630 works well for non-clear coats.

| TEST DATA |
|--------------------|------------------|
| Flexibility (ASTM D1737) | Pass ¼" Mandrel |
| Dry Heat Resistance | 200 °F |
| Wet Heat Resistance | 125 °F |
| Adhesion (ASTM D3359) | Pass SB |
| Accelerated Weathering (ASTM G53) 1000 Hours 1 coat V150 Primer, 2 coats V510 | 95% Gloss Retention < 0.25 DE Color Change (CMC) |
| Salt Fog Resistance (ASTM B117) 2000 Hours (Same system as above) | Rust Breakthrough: 10 Rating |
| Abrasion Resistance (ASTM D4060) Taper (CS-10 Wheel, 1000g load, 1000 cycles) | 80 mg, loss |

| CHEMICAL RESISTANCE GUIDE (NON-IMMERSION) |
|-----------------------------|---------------|
| Fresh Water | Excellent |
| Salt Water | Excellent |
| Acids | Excellent |
| Alkalis | Excellent |
| Solvents | Excellent |
| Fuel | Excellent |
| Acidic Salt Solutions | Excellent |
| Alkaline Salt Solutions | Excellent |
| Neutral Salt Solutions | Excellent |

| SYSTEMS RECOMMENDATIONS |
|--------------------------|------------------|
| PRIMERS | |
| Ferrous Metal (Blasted) | V150 Line, V155-00 or V160 Line |
| Ferrous Metal (Marginally Prepared) | V155-00 or V160 Line |
| Non-Ferrous Metal | V110 Line or V175-00 |
| Concrete | V155-00, V160 Line, V163-01, or V400-00 Clear |
| Aged coatings | Use Direct (Check Compatibility) or use V110 Line or V155-00 as a barrier Coat |

COMPATIBLE INTERMEDIATES

V160 Line, V163-01

For substrates other than listed above, or for usage in severe environmental conditions, please consult with Corotech® Technical Service.
Clean Up
Clean up with Corotech® V700 Urethane Reducer.

Environmental Health & Safety Information

DANGER!
Harmful if inhaled
May cause allergy or asthma symptoms or breathing difficulties if inhaled
May cause an allergic skin reaction
Suspected of causing cancer
May cause respiratory irritation. May cause drowsiness or dizziness
May cause damage to organs through prolonged or repeated exposure
Highly flammable liquid and vapor

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Do not breathe dust/fume/ mist/ vapors/ spray. Use only outdoors or in a well-ventilated area. In case of inadequate ventilation wear respiratory protection. Contaminated work clothing should not be allowed out of the workplace. Keep away from heat/sparks/open flames/hot surfaces, no smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ ventilating/lighting/equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves/ protective clothing/eye protection/face protection. Keep cool.

Response: If exposed or concerned get medical attention. If skin irritation or rash occurs get medical attention. Wash contaminated clothing before reuse. If on skin (or hair) take off immediately all contaminated clothing. Rinse skin with water. If inhaled remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or physician. In case of fire use CO2, dry chemical, or foam for extinction.

Storage: Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Disposal: Dispose of contents/container to an approved waste disposal plant.

IMPORTANT: Designed to be mixed with other components. Mixture will have hazards of all components. Before opening packages, read all warning labels. Follow all precautions.

CAUTION: All floor coatings may become slippery when wet. Where non-skid characteristics are desired, use an appropriate anti-slip aggregate.

WARNING Cancer and Reproductive Harm--
www.P65warnings.ca.gov

This document represents hazards of the product referenced above. Refer to the individual Safety Data Sheet for hazards of the specific product you will be using.

KEEP OUT OF REACH OF CHILDREN FOR PROFESSIONAL USE ONLY

Refer to Safety Data Sheet for additional health and safety information.