Benjamin Moore

COROTECH HIGH PERFORMANCE

ALIPHATIC ACRYLIC URETHANE V515

Features

- Durable film offers excellent gloss and color retention on exterior substrates
- Excellent abrasion, chemical, and solvent resistance in industrial applications
- Balance of performance and price in a lower solids urethane
- Good salt fog resistance
- Shop/OEM use only; not OTC compliant

General Description

Aliphatic Acrylic Urethane is a high-performance, two-component aliphatic acrylic polyurethane designed for shop/OEM use. Can also be used as a non-sacrificial anti-graffiti coating. **This is a two component product that requires 3 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

Typical market segments include Food and Beverage Processing, Industrial Maintenance, Paper and Pulp Processing, Transportation, Industrial Flooring, General Metal Finishing / Fabrication, Chemical Processing, Commercial Structures, Tank Exteriors and other areas requiring a long life, high performance urethane.

Limitations

- Do not apply at ambient or surface temperatures below 50 °F (10 °C). Relative humidity should be below 90%.
- This product is not intended for immersion services.
- Coated surfaces may discolor under tires due to plasticizer migration.

Product Information

Colors — Standard:

Clear (00), Tintable White (86), Black (80)

— Tint Bases:

Tintable White (86), Deep Base (87), Clear Base (88)

Tint With Industrial Colorants Only

— Special Colors:

Contact your retailer.

Certification & Qualifications:

VOC compliant in federally regulated areas only

The products supported by this data sheet contain a maximum of Clear 460 (3.83 lbs. /gal.) and White 400 grams per liter VOC (3.75 lbs. /gal.) excluding water and exempt solvents.

Master Painters Institute MPI # 78, 83* (*with anti-skid additive), 105 (SHOP/OEM use) & 205

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

Technical Data◊		Tintable White
Generic Type		Aliphatic Acrylic Urethane
Pigment Type		Titanium Dioxide
Volume Solids		55 ± 1.0%
Coverage per Gallon at Recommended Film Thickness		450 – 550 Sq. Ft.
Recommended Film Thickness	– Wet	2.9 – 3.6 mils
	– Dry	1.6 – 2.0 mils
Depending on surface texture and porosity. Be sure to estimate the right amount of paint for the job. This will ensure color uniformity and minimize the disposal of excess paint.		
Dry Time @ 77 °F (25 °C) @ 50% RH	– To Touch	1 Hour
	– To Recoat	4 Hours*
	–. Full Cure	3 – 5 Days
*If top coat is not applied within 72 hours abrade the surface to ensure proper inter-coat adhesion. Maximum abrasion and chemical resistance are achieved at full cure; care should be taken to prevent damage to the coating during the curing process. High humidity and cool temperatures will result in longer dry, recoat and cure times.		
Dries By		Chemical Cure
Dry Heat Resistance		300°F
Viscosity @ 77 °F (mixed as recommended)		65 – 70 KU
Flash Point		Mixed: 80 °F (TT-P-141, Method 4293)
Gloss/Sheen		High Gloss (85+ @ 60°)
Surface Temperature at application	– Min.	50 °F
	– Max.	90 °F
Surface must be dry and at least 5° above the dew point		
Thin With		Do Not Thin
Clean Up Thinner		Urethane Reducer V700
Mixed Ratio (by volume)		3 : 1
Induction time @ 77°F (25°C)		15 Minutes
Pot Life @ 77°F (25°C)		5 Hours
Weight Per Gallon (mixed as recommended)		10.4 lbs.
Storage Temperature	– Min.	40 °F
	– Max.	90 °F

Volatile Organic Compounds (VOC)
447 Grams / Liter* 3.3 Lbs. / Gallon*
* Catalyzed

◊ Reported values are for Tintable White. Contact your retailer for values of other bases or colors.

Surface Preparation

The performance of this product is directly dependent upon the degree of surface preparation employed. All dirt, oils, accumulated salts, and other contaminants must be removed prior to employing specific surface preparation methods. Removal of all contaminants should be completed in accordance with SSPC-SP1 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. For ferrous metal and concrete: see primer section of this document followed by specific primer data sheets for substrate preparation methods, as this product should not be applied directly to these substrates.

Non-ferrous metals, fiberglass, and existing coatings should be solvent cleaned (SSPC-SP1), and abraded to provide sufficient surface profile. Then apply a test patch area to check adhesion and compatibility. The use of a primer may be necessary.

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. Clean up carefully with a HEPA vacuum and a wet mop. Before you start, find out how to protect yourself and your family by contacting the National Lead Informational Hotline at 1-800-424-LEAD or log on to www.epa.gov/lead .

Application

Mix the "A" component thoroughly before application; the use of a drill mixer at low speed will best accomplish this task. Add the full contents of the "B" component to the "A" and thoroughly mix the two together. Allow 15 minutes @ 77 °F (25 °C) induction or "sweat-in" time prior to applying the mixed product to the substrate. Do not apply if air or surface temperatures are below 50 °F (10 °C) or above 90 °F (35 °C), or in relative humidity levels greater than 90%, 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.

The dry and recoat times may be reduced by using up to 2 ounces per gallon of Corotech® V700 Urethane Reducer per gallon. Usable pot life will be reduced to 2 hours @ 77 °F (25 °C) if accelerator is used.

Airless Spray (Preferred Method): Tip range between 13 and 17 thousandths. Total fluid output pressure at tip should not be less than 2400 psi.

Air Spray (Pressure Pot): DeVilbis MBC or JGA gun, with 704 or 765 air cap and Fluid Tip E.

NOTE: Do not allow material to remain in hoses, gun or spray equipment. Thoroughly flush all equipment with recommended thinner or follow local/state guidelines on solvent use. If material begins gelling, immediately flush equipment as product has reached pot life.

Brush: Natural Bristle only.

Roller: Industrial Cover with Phenolic core.

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 1/4" Mandrel
Dry Heat Resistance	300 °F
Wet Heat Resistance	125 °F
Adhesion (ASTM D3359)	Pass 5B
Accelerated Weathering (ASTM G53)	95% Gloss Retention <0.25 DE Color Change (CMC)
Abrasion Resistance (ASTM D4060) Taber (CS-10 Wheel, 1000g load 1000 cycles	80 mg loss
Salt Fog Resistance (ASTM B117) 1000 Hours (same system as above)	Rust Breakthrough – 10 Rating Rust Area – 0.01%

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

SYSTEMS RECOMMENDATIONS	
PRIMERS	
Ferrous Metal (Blasted)	V110 Line, 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	Use Direct or use V110 Line, V114-01, or V155-00, V160 Line, V163-01, or V400-00 Clear
Aged coatings	Use Direct (Check Compatibility) or use V110, V155 Line as a barrier Coat
COMPATIBLE INTERMEDIATES	
V160 Line, V163	
For substrates other than listed above, or for usage in severe environmental conditions, please consult with Corotech® Technical Service.	

Clean Up

Clean up with a Corotech® V700 Urethane Reducer or follow local/state guidelines on solvent use.

Environmental Health & Safety Information

Danger!

Harmful if inhaled

Causes skin irritation

Causes serious eye irritation

May cause allergy or asthma symptoms or breathing difficulties if inhaled

May cause an allergic skin reaction

Suspected of causing cancer

Suspected of damaging fertility or the unborn child

May cause respiratory irritation. May cause drowsiness or dizziness

May cause damage to organs through prolonged or repeated exposure

May be fatal if swallowed and enters airways

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. Use only outdoors or in a well-ventilated area. Wash face, hands and any exposed skin thoroughly after handling. In case of inadequate ventilation wear respiratory protection. Contaminated work clothing should not be allowed out of the workplace. Do not breathe dust/fume/ mist/ vapors/ spray. 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. Keep cool. Wear protective gloves/protective clothing/eye protection/face protection.

Response: If exposed or concerned, get medical attention. If in eyes rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists get medical attention. If skin irritation or rash occurs get medical attention. If on skin (or hair) take off immediately all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse. 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. If swallowed immediately call a POISON CENTER or physician. Do NOT induce vomiting. In case of fire use CO_2, dry chemical, or foam for extinction.

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

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.


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.

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