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## 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name
Product Code
Alternate Product Code

SAP Material Number Product Class

Color

Recommended use

Restrictions on use

ALIPHATIC ACRYLIC URETHANE SEMI-GLOSS CATALYST V510-90, 3000755

V51090, V51099 NA, 3000755 FINISH COATING

ΑII

Industrial paint

No information available

Manufacturer

Benjamin Moore & Co. 101 Paragon Drive Montvale, NJ 07645 Phone: 1-866-708-9180 corotechcoatings.com **Emergency Telephone** 

CHEMTREC (US): 800-424-9300

CHEMTREC (outside US): (703)-527-3887

## 2. HAZARDS IDENTIFICATION

## Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

	lo
Acute toxicity - Inhalation (Vapors)	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Respiratory sensitization	Category 1
Skin sensitization	Category 1
Specific target organ toxicity (single exposure)	Category 3
Flammable liquids	Category 2

## Label elements

## Danger

#### Hazard statements

Harmful if inhaled

May cause allergy or asthma symptoms or breathing difficulties if inhaled

May cause an allergic skin reaction

May cause respiratory irritation

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Highly flammable liquid and vapor



Appearance liquid Odor solvent

## **Precautionary Statements - Prevention**

Avoid breathing dust/fume/gas/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, hot surfaces, sparks, open flames and other ignition sources. 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

#### Skin

If skin irritation or rash occurs: Get medical advice/attention

Wash contaminated clothing before reuse

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

#### Inhalation

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 doctor/physician

#### Fire

In case of fire: Use CO2, dry chemical, or foam for extinction

## **Precautionary Statements - Storage**

Store in a well-ventilated place. Keep container tightly closed

Store locked up

#### **Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

#### Hazards not otherwise classified (HNOC)

Not applicable

## Other information

No information available

#### Other hazards

**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.

## 3. COMPOSITION INFORMATION ON COMPONENTS

Chemical name	CAS No.	Weight-%
Hexane, 1,6-diisocyanato-, homopolymer	28182-81-2	85
t-Butyl acetate	540-88-5	20
Hexamethylene-1,6-diisocyanate	822-06-0	0.5

## 4. FIRST AID MEASURES

### **Description of first aid measures**

General Advice If symptoms persist, call a physician. Show this safety data sheet to the doctor in

attendance.

**Eye Contact** Immediately flush with plenty of water. After initial flushing, remove any contact

lenses and continue flushing for at least 15 minutes. Keep eye wide open while

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rinsing. If symptoms persist, call a physician.

**Skin Contact** Wash off immediately with soap and plenty of water while removing all

contaminated clothes and shoes. If skin irritation persists, call a physician. Wash

clothing before reuse. Destroy contaminated articles such as shoes.

**Inhalation** Move to fresh air. If symptoms persist, call a physician.

If not breathing, give artificial respiration. Call a physician immediately.

**Ingestion** Clean mouth with water and afterwards drink plenty of water. Do not induce

vomiting without medical advice. Never give anything by mouth to an unconscious

person. Consult a physician.

**Protection Of First-Aiders** Use personal protective equipment.

Most Important Symptoms/Effects May cause allergy or asthma symptoms or breathing difficulties if inhaled. May

cause allergic skin reaction.

Notes To Physician Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

Flammable Properties Vapors may travel considerable distance to a source of

ignition and flash back. Vapors may cause flash fire.

Suitable Extinguishing Media Foam, dry powder or water. Use extinguishing measures

that are appropriate to local circumstances and the

surrounding environment.

**Protective Equipment And Precautions For** 

**Firefighters** 

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent)

and full protective gear.

Hazardous combustion products

Burning may result in carbon dioxide, carbon monoxide

and other combustion products of varying composition

which may be toxic and/or irritating.

Specific Hazards Arising From The Chemical Flammable. Flash back possible over considerable

distance. Keep product and empty container away from heat and sources of ignition. Closed containers may rupture if exposed to fire or extreme heat. Thermal decomposition can lead to release of irritating gases and

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vapors.

Sensitivity To Mechanical Impact No

Sensitivity To Static Discharge Yes

Flash Point Data

Flash Point (°F) 40
Flash Point (°C) 4
Method PMCC

Flammability Limits In Air

Lower flammability limit:Not availableUpper flammability limit:Not available

NFPA Health: 2 Flammability: 3 Instability: 1 Special: Not Applicable

## **NFPA Legend**

0 - Not Hazardous

- 1 Slightly
- 2 Moderate
- 3 High
- 4 Severe

The ratings assigned are only suggested ratings, the contractor/employer has ultimate responsibilities for NFPA ratings where this system is used.

Additional information regarding the NFPA rating system is available from the National Fire Protection Agency (NFPA) at www.nfpa.org.

## 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Remove all sources of ignition. Take precautions to prevent flashback. Ground

and bond all containers and handling equipment. Take precautionary measures against static discharges. Ensure adequate ventilation. Avoid contact with skin,

eyes and clothing. Use personal protective equipment.

Other Information Prevent further leakage or spillage if safe to do so. Do not allow material to

contaminate ground water system. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. Local authorities should be

advised if significant spillages cannot be contained.

**Environmental precautions** See Section 12 for additional Ecological Information.

Methods for Cleaning Up Dam up. Soak up with inert absorbent material. Use a non-sparking or explosion

proof means to transfer material to a sealed, appropriate container for disposal.

Clean contaminated surface thoroughly.

## 7. HANDLING AND STORAGE

Handling

Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Do not breathe vapors or spray mist. Use only in ventilated areas. Prevent vapor build-up by providing adequate ventilation during and after use.

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Take precautionary measures against static discharges. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Keep away from heat, sparks and flame. Do not smoke. Extinguish all flames and pilot lights, and turn off stoves, heaters, electric motors and other sources of ignition during use and until all vapors are gone. Ignition and/or flash back may occur.

Storage

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat. Keep away from open flames, hot surfaces and sources of ignition. Keep in properly labeled containers. Keep out of the reach of children.

**Incompatible Materials** 

Incompatible with strong acids and bases and strong oxidizing agents.

Technical measures/Precautions Ensure adequate ventilation. Use only where airflow will keep vapors from building up in or near the work area in adjoining rooms. Comply with all national, state, and local codes pertaining to the storage, handling, dispensing and disposal of flammable liquids.

> Dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. All equipment should be non-sparking and explosion proof. Use explosion proof electrical equipment for ventilation, lighting and material handling.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## **Exposure Limits**

Chemical name	ACGIH TLV	OSHA PEL
t-Butyl acetate	200 ppm - TWA	200 ppm - TWA
		950 mg/m³ - TWA
Hexamethylene-1,6-diisocyanate	0.005 ppm - TWA	N/E

#### Legend

ACGIH - American Conference of Governmental Industrial Hygienists Exposure Limits

OSHA - Occupational Safety & Health Administration Exposure Limits

N/E - Not Established

Appropriate engineering controls

**Engineering Measures** Ensure adequate ventilation, especially in confined areas.

**Personal Protective Equipment** 

**Eve/Face Protection Skin Protection Respiratory Protection**  Safety glasses with side-shields.

Long sleeved clothing. Protective gloves.

Use only with adequate ventilation. In operations where exposure limits are exceeded, use a NIOSH approved respirator that has been selected by a technically qualified person for the specific work conditions. When spraying the product or applying in confined areas, wear a NIOSH approved respirator

specified for paint spray or organic vapors.

Hygiene Measures Avoid contact with skin, eyes and clothing. Remove and wash contaminated

clothing before re-use. Wash thoroughly after handling.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance liquid Odor solvent

Odor Threshold No information available

 Density (lbs/gal)
 9.15 - 9.25

 Specific Gravity
 1.09 - 1.11

pH No information available
Viscosity (cps) No information available
Solubility(ies) No information available
Water solubility No information available
Evaporation Rate No information available
Vapor pressure @20 °C (kPa) No information available

Vapor pressure @20 °C (kPa)No information availableVapor densityNo information available

 Wt. % Solids
 80 - 90

 Vol. % Solids
 75 - 85

 Wt. % Volatiles
 10 - 20

 Vol. % Volatiles
 15 - 25

 VOC Regulatory Limit (g/L)
 <340</td>

 Boiling Point (°F)
 208

 Boiling Point (°C)
 98

Freezing Point (°F)

Freezing Point (°C)

No information available
No information available

Flash Point (°F) 40
Flash Point (°C) 4
Method PMCC

Flammability (solid, gas) Not applicable

Upper flammability limit:

Lower flammability limit:

Autoignition Temperature (°F)

Autoignition Temperature (°C)

Decomposition Temperature (°F)

Decomposition Temperature (°C)

No information available

## 10. STABILITY AND REACTIVITY

**Reactivity** No data available

Chemical Stability Stable under normal conditions. Hazardous polymerisation

does not occur.

Conditions to avoid Keep away from open flames, hot surfaces, static

electricity and sources of ignition. Sparks. Elevated

temperature.

Incompatible Materials Incompatible with strong acids and bases and strong

oxidizing agents.

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Hazardous Decomposition Products

Thermal decomposition can lead to release of irritating

gases and vapors.

Possibility of hazardous reactions None under normal conditions of use.

# 11. TOXICOLOGICAL INFORMATION

## **Product Information**

## Information on likely routes of exposure

**Principal Routes of Exposure** Eye contact, skin contact and inhalation.

**Acute Toxicity** 

**Product Information** Repeated or prolonged exposure to organic solvents may lead to permanent brain

and nervous system damage. Intentional misuse by deliberately concentrating and

inhaling vapors may be harmful or fatal.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Eye contact** Contact with eyes may cause irritation.

**Skin contact** May cause skin irritation and/or dermatitis. Prolonged skin contact may defat the

skin and produce dermatitis.

Ingestion Harmful if swallowed. Ingestion may cause irritation to mucous membranes. Small

amounts of this product aspirated into the respiratory system during ingestion or vomiting may cause mild to severe pulmonary injury, possibly progressing to

death.

**Inhalation** Harmful by inhalation. High vapor / aerosol concentrations are irritating to the

eyes, nose, throat and lungs and may cause headaches, dizziness, drowsiness,

unconsciousness, and other central nervous system effects.

**Sensitization** Respiratory sensitizer

May cause allergy or asthma symptoms or breathing difficulties if inhaled

May cause an allergic skin reaction

No information available. **Neurological Effects Mutagenic Effects** No information available. Reproductive Effects No information available. **Developmental Effects** No information available. **Target organ effects** No information available. STOT - repeated exposure No information available. No information available. STOT - single exposure Other adverse effects No information available.

Aspiration Hazard May be harmful if swallowed and enters airways. Small amounts of this product

aspirated into the respiratory system during ingestion or vomiting may cause mild

to severe pulmonary injury, possibly progressing to death.

Numerical measures of toxicity

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#### The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 23575 mg/kg
ATEmix (dermal) 11512 mg/kg
ATEmix (inhalation-dust/mist) 3.9 mg/L
ATEmix (inhalation-vapor) 13 mg/L

**Acute Toxicity** 

**Component Information** 

Hexane, 1,6-diisocyanato-, homopolymer

LD50 Oral: > mg/kg (Rat) LD50 Dermal: > mg/kg (Rabbit)

LC50 Inhalation (Vapor): mg/m³ (Rat, 4 hr.) Sensitization skin - positive (guinea pig) Hexamethylene-1,6-diisocyanate

LD50 Oral: µL/kg (Rat)

LD50 Dermal: μL/kg (Rabbit)

LC50 Inhalation (Vapor): mg/m³ (Rat, 4 hr.)

Sensitization Respiratory sensitizer skin - positive (guinea pig)

#### Carcinogenicity

There are no known carcinogenic chemicals in this product above reportable levels.

## 12. ECOLOGICAL INFORMATION

## **Ecotoxicity Effects**

The environmental impact of this product has not been fully investigated.

## **Product Information**

#### **Acute Toxicity to Fish**

No information available

#### **Acute Toxicity to Aquatic Invertebrates**

No information available

## **Acute Toxicity to Aquatic Plants**

No information available

#### Persistence / Degradability

No information available.

#### Bioaccumulation

No information available.

## Mobility in Environmental Media

No information available.

**Ozone** 

Not applicable

# **Component Information**

#### **Acute Toxicity to Fish**

No information available

#### **Acute Toxicity to Aquatic Invertebrates**

No information available

### **Acute Toxicity to Aquatic Plants**

Hexane, 1,6-diisocyanato-, homopolymer

EC50: > 1000 mg/L (Green algae (Scenedesmus subspicatus), 72 hrs.)

## 13. DISPOSAL CONSIDERATIONS

Waste Disposal Method Dispose of in accordance with federal, state, and local regulations. Local

requirements may vary, consult your sanitation department or state-designated

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environmental protection agency for more disposal options.

Empty Container Warning Emptied containers may retain product residue. Follow label warnings even after

container is emptied. Residual vapors may explode on ignition.

## 14. TRANSPORT INFORMATION

DOT

Proper Shipping Name PAINT Hazard class 3 UN-No. UN1263

Packing Group

**Description** UN1263, PAINT, 3, II

ICAO / IATA Contact the preparer for further information.

**IMDG / IMO**Contact the preparer for further information.

## 15. REGULATORY INFORMATION

#### **International Inventories**

**TSCA: United States**Yes - All components are listed or exempt. **DSL: Canada**Yes - All components are listed or exempt.

## Federal Regulations

#### SARA 311/312 hazardous categorization

Acute health hazard Yes
Chronic Health Hazard No

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Fire hazard Yes
Sudden release of pressure hazard No
Reactive Hazard No

# **SARA** 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

None

## Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product contains the following HAPs:

Chemical name	CAS No.	Weight-%	<b>Hazardous Air Pollutant</b>
			<u>(HAP)</u>
Hexamethylene-1,6-diisocyanate	822-06-0	0.5	Listed

# **US State Regulations**

#### **California Proposition 65**



WARNING: Cancer and Reproductive Harm– www.P65warnings.ca.gov

## State Right-to-Know

Chemical name	Massachusetts	New Jersey	Pennsylvania
t-Butyl acetate	X	X	X
Hexamethylene-1,6-diisocyanate	X	X	

#### Legend

X - Listed

## 16. OTHER INFORMATION

HMIS - Health: 2 Flammability: 3 Reactivity: 1 PPE: -

## **HMIS Legend**

- 0 Minimal Hazard
- 1 Slight Hazard
- 2 Moderate Hazard
- 3 Serious Hazard
- 4 Severe Hazard
- \* Chronic Hazard
- X Consult your supervisor or S.O.P. for "Special" handling instructions.

Note: The PPE rating has intentionally been left blank. Choose appropriate PPE that will protect employees from the hazards the material will present under the actual normal conditions of use.

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer, has chosen to provide them. HMIS® ratings are to be used only in conjunction with a fully implemented HMIS® program by workers who have received appropriate HMIS® training. HMIS® is a

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registered trade and service mark of the NPCA. HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

**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 Information Hotline at 1-800-424-LEAD or log on to www.epa.gov/lead.

Prepared By Product Stewardship Department

Benjamin Moore & Co. 101 Paragon Drive Montvale, NJ 07645 800-225-5554

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**END OF SAFETY DATA SHEET**