



Revision Date: 26-Jun-2018 Revision Number: 2

## 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name BENJAMIN MOORE COROTECH ALKYD URETHANE ENAMEL

**GLOSS WHITE** 

Product Code CV200-01

Alternate Product Code C20001

Product Class SOLVENT THINNED PAINT

Color White

Recommended use Industrial paint

Restrictions on use No information available

Manufacturer Emergency Telephone

Benjamin Moore & Co. CHEMTREC (US): 800-424-9300
101 Paragon Drive CHEMTREC (outside US): (703)-527-3887

101 Paragon Drive Montvale, NJ 07645 Phone: 1-866-708-9180 corotechcoatings.com

## 2. HAZARDS IDENTIFICATION

#### Classification

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

Skin sensitization	Category 1
Carcinogenicity	Category 2
Specific target organ toxicity (repeated exposure)	Category 1
Aspiration toxicity	Category 1
Flammable liquids	Category 3

#### Label elements

## Danger

#### Hazard statements

May cause an allergic skin reaction
Suspected of causing cancer
Causes damage to organs through prolonged or repeated exposure
May be fatal if swallowed and enters airways

Flammable liquid and vapor

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Appearance liquid Odor solvent

## **Precautionary Statements - Prevention**

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

Contaminated work clothing should not be allowed out of the workplace

Wear protective gloves

Do not breathe dust/fume/gas/mist/vapors/spray

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

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

#### **Precautionary Statements - Response**

IF exposed or concerned: Get medical advice/attention

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

Ingestion

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Do NOT induce vomiting

Fire

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

#### **Precautionary Statements - Storage**

Store locked up

Store in a well-ventilated place. Keep cool

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

Dispose of contents/container to an approved waste disposal plant

## <u>Hazards not otherwise classified (HNOC)</u>

Rags, steel wool or waste soaked with this product may spontaneously catch fire if improperly discarded

#### Other information

No information available

#### 3. COMPOSITION INFORMATION ON COMPONENTS

Chemical name	CAS No.	Weight-%
Titanium dioxide	13463-67-7	25
Solvent naphtha, petroleum, medium aliphatic	64742-88-7	15
Limestone	1317-65-3	10
Methyl acetate	79-20-9	10
Kaolin	1332-58-7	5
4-Chlorobenzotrifluoride	98-56-6	5
Silica, amorphous	7631-86-9	5
Ethyl benzene	100-41-4	0.5
Methyl ethyl ketoxime	96-29-7	0.5
Cobalt bis(2-ethylhexanoate)	136-52-7	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 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)

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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

vapors.

Sensitivity To Mechanical Impact No

Sensitivity To Static Discharge Yes

**Flash Point Data** 

Flash Point (°F) 79.0 Flash Point (°C) 26.0 Method PMCC

Flammability Limits In Air

Lower flammability limit:

Upper flammability limit:

Not available

Not available

NFPA Health: 2 Flammability: 3 Instability: 0 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.

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#### 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.

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.

**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.

## **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
Titanium dioxide	10 mg/m³ - TWA	15 mg/m³ - TWA
Limestone	N/E	15 mg/m³ - TWA 5 mg/m³ - TWA
Methyl acetate	200 ppm - TWA 250 ppm - STEL	200 ppm - TWA 610 mg/m³ - TWA
Kaolin	2 mg/m³ - TWA	15 mg/m³ - TWA 5 mg/m³ - TWA
4-Chlorobenzotrifluoride	2.5 mg/m <sup>3</sup> - TWA	2.5 mg/m <sup>3</sup> - TWA

Silica, amorphous	N/E	20 mppcf - TWA
Ethyl benzene	20 ppm - TWA	100 ppm - TWA 435 mg/m³ - TWA

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** 

**Eye/Face Protection** Safety glasses with side-shields.

**Skin Protection** Long sleeved clothing. Protective gloves.

**Respiratory Protection** 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

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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.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance liquid
Odor solvent

Odor Threshold No information available

 Density (lbs/gal)
 10.5 - 10.6

 Specific Gravity
 1.25 - 1.28

pH No information available Viscosity (cps) No information available

Viscosity (cps)

Solubility(ies)

Water solubility

Evaporation Rate

Vapor pressure @20 °C (kPa)

No information available
No information available
No information available
No information available

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

 Wt. % Solids
 70 - 80

 Vol. % Solids
 55 - 65

 Wt. % Volatiles
 20 - 30

 Vol. % Volatiles
 35 - 45

 VOC Regulatory Limit (g/L)
 < 250</td>

 Boiling Point (°F)
 158.0

 Boiling Point (°C)
 70.0

Freezing Point (°F)

No information available

Freezing Point (°C)

No information available

 Flash Point (°F)
 79.0

 Flash Point (°C)
 26.0

 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

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temperature.

Incompatible Materials Incompatible with strong acids and bases and strong

oxidizing agents.

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,

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unconsciousness, and other central nervous system effects.

Sensitization May cause an allergic skin reaction

Neurological EffectsNo information available.Mutagenic EffectsNo information available.Reproductive EffectsNo information available.Developmental EffectsNo information available.Target organ effectsNo information available.

**STOT - repeated exposure**Causes damage to organs through prolonged or repeated exposure if inhaled.

STOT - single exposure No information available. 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

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

ATEmix (oral) 14967 mg/kg ATEmix (dermal) 13195 mg/kg

**Acute Toxicity** 

**Component Information** 

Titanium dioxide

LD50 Oral: > 10000 mg/kg (Rat)

Solvent naphtha, petroleum, medium aliphatic

LD50 Oral: > 6240 mg/kg (Rat) LD50 Dermal: > 3120 mg/kg (Rabbit)

LC50 Inhalation (Vapor): 1400 ppm (Rat, 4 hr.)

Kaolin

LD50 Oral: > 5000 mg/kg (Rat)

4-Chlorobenzotrifluoride LD50 Oral: (Rat) mg/kg LD50 Dermal: mg/kg (Rabbit)

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

Silica, amorphous

LD50 Oral: > 5000 mg/kg (Rat) LD50 Dermal: 2,000 mg/kg (Rabbit) LC50 Inhalation (Dust): > 2 mg/L

Ethyl benzene

LD50 Oral: mg/kg (Rat)

LD50 Dermal: > mg/kg (Rabbit)

LC50 Inhalation (Vapor): mg/m<sup>3</sup> (Rat, 2 hr.)

Methyl ethyl ketoxime LD50 Oral: 930 mg/kg (Rat) LD50 Dermal: 200 μL/kg (Rabbit)

LC50 Inhalation (Vapor): > 4.8 mg/L (Rat)

#### Carcinogenicity

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The information below indicates whether each agency has listed any ingredient as a carcinogen:.

Chemical name	IARC	NTP	OSHA
	2B - Possible Human		Listed
Titanium dioxide	Carcinogen		
	2B - Possible Human		Listed
Ethyl benzene	Carcinogen		
	2B - Possible Human		Listed
Cobalt bis(2-ethylhexanoate)	Carcinogen		

<sup>•</sup> Although IARC has classified titanium dioxide as possibly carcinogenic to humans (2B), their summary concludes: "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium dioxide is bound to other materials, such as paint."

#### Legend

IARC - International Agency for Research on Cancer NTP - National Toxicity Program OSHA - Occupational Safety & Health Administration

## 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**

There is no data for this product.

#### **Mobility in Environmental Media**

No information available.

#### **Ozone**

Not applicable

## **Component Information**

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

<sup>•</sup> Cobalt and cobalt compounds are listed as possible human carcinogens by IARC (2B). However, there is inadequate evidence of the carcinogenicity of cobalt and cobalt compounds in humans.

Titanium dioxide

LC50: > 1000 mg/L (Fathead Minnow - 96 hr.)

Ethyl benzene

LC50: 12.1 mg/L (Fathead Minnow - 96 hr.)

Methyl ethyl ketoxime

LC50: 48 mg/L (Bluegill sunfish - 96 hr.)

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

Ethyl benzene

EC50: 1.8 mg/L (Daphnia magna - 48 hr.)

Methyl ethyl ketoxime

EC50: 750 mg/L (Daphnia magna - 48 hr.)

## **Acute Toxicity to Aquatic Plants**

Ethyl benzene

EC50: 4.6 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 NamePAINTHazard class3UN-No.UN1263

Packing Group

**Description** UN1263, PAINT, 3, III, Marine Pollutant (Solvent naphtha, petroleum, medium

aliphatic)

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.

No - Not all of the components are listed.

No - Not all of the components are listed. One or more component is listed on NDSL.

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# Federal Regulations

## SARA 311/312 hazardous categorization

Acute health hazard	Yes
Chronic Health Hazard	Yes
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:

Chemical name	CAS No.	Weight-%	CERCLA/SARA 313
			(de minimis concentration)
Ethyl benzene	100-41-4	0.5	0.1

## 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>
Ethyl benzene	100-41-4	0.5	Listed

# **US State Regulations**

# **California Proposition 65**



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

## State Right-to-Know

Chemical name	Massachusetts	New Jersey	Pennsylvania
Titanium dioxide	X	X	X
Solvent naphtha, petroleum, medium aliphatic		X	
Limestone	X	Χ	X
Methyl acetate	X	X	X
Kaolin	X	Χ	X
4-Chlorobenzotrifluoride		Χ	
Silica, amorphous	X	Х	X
2-Butoxyethanol	X	Х	Х

## Legend

X - Listed

## 16. OTHER INFORMATION

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HMIS -Health: 2\* Flammability: 3 Reactivity: 0 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 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.

**Product Stewardship Department Prepared By** 

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

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#### Disclaimer

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**END OF SAFETY DATA SHEET**