

Revision Date: 05-Jan-2016 Revision Number: 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name HEAVY DUTY URETHANE MODIFIED ALKYD ENAMEL

BRONZETONE

Product Code G400-41
Alternate Product Code TJ0441

Product Class SOLVENT THINNED PAINT

Color Bronze

Recommended use Rust preventative No information available

Manufacturer
Benjamin Moore & Co.
101 Paragon Drive
Montvale, NJ 07645

Phone: 800-225-5554

insl-x.com

Emergency Telephone Number(s)

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)

Carcinogenicity	Category 1A
Specific target organ toxicity (repeated exposure)	Category 1
Aspiration toxicity	Category 1
Flammable liquids	Category 3

Label elements

Danger

Hazard statements

May cause cancer

Causes damage to organs through prolonged or repeated exposure

May be fatal if swallowed and enters airways

Flammable liquid and vapor



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

Do not breathe dust/fume/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/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

Precautionary Statements - Response

If exposed or concerned get medical attention

Skin

If on skin (or hair) take off immediately all contaminated clothing. Rinse skin with water

Ingestion

If swallowed immediately call a POISON CENTER or 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

Hazards not otherwise classified (HNOC)

Not Applicable

Other information

No information available

Other Hazards

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight % (max)
Limestone	1317-65-3	30
Stoddard solvent	8052-41-3	20
Talc	14807-96-6	10
Distillates, petroleum, hydrotreated light	64742-47-8	5
Titanium dioxide	13463-67-7	5
Carbon black	1333-86-4	0.5
Silica, crystalline	14808-60-7	0.5
Cobalt bis(2-ethylhexanoate)	136-52-7	0.5

4. 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 removing all contaminated

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

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-AidersUse personal protective equipment.

Most Important Symptoms/Effects No information available.

Notes To Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

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.

Specific Hazards Arising From The Chemical Combustible material. Closed containers may rupture if

exposed to fire or extreme heat. Keep product and empty container away from heat and sources of ignition. 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) 104
Flash Point (°C) 40
Flash Point Method PMCC

Flammability Limits In Air

Lower Explosion LimitNot availableUpper Explosion LimitNot available

NFPA Health: 1 Flammability: 2 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 PrecautionsUse personal protective equipment. Remove all sources of ignition.

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

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advised if significant spillages cannot be contained.

Environmental Precautions See Section 12 for additional Ecological Information.

Methods For Clean-Up Dam up. Soak up with inert absorbent material. Pick up and transfer to properly

labeled containers. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

HandlingUse only in area provided with appropriate exhaust ventilation. Do not breathe

vapors or spray mist. Wear personal protective equipment. 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

open flames, hot surfaces and sources of ignition.

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.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits

Chemical Name	ACGIH	OSHA
Limestone	N/E	15 mg/m ³ - TWA total
		5 mg/m ³ - TWA
Stoddard solvent	100 ppm - TWA	2900 mg/m ³ - TWA
		500 ppm - TWA
Talc	2 mg/m³ - TWA	20 mppcf - TWA
Titanium dioxide	10 mg/m³ - TWA	15 mg/m³ - TWA
Carbon black	3.5 mg/m ³ - TWA	3.5 mg/m ³ - TWA
Silica, crystalline	0.025 mg/m ³ - TWA	respirable - (10)/(%SiO2 + 2) mg/m ³
		TWA
		respirable - (250)/(%SiO2 + 5) mppcf

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TWA
total dust - (30)/(%SiO2 + 2) mg/m ³
TWA

Legend

ACGIH - American Conference of Governmental Industrial Hygienists Exposure Limits

OSHA - Occupational Safety & Health Administration Exposure Limits

N/E - Not Established

Engineering Measures Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

Eye/Face Protection

Skin Protection

Boiling Point (°C)

Safety glasses with side-shields.

Long sleeved clothing. Protective gloves.

Respiratory Protection 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

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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. When using do not eat,

drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

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Appearance liquid Odor solvent

No information available **Odor Threshold**

Density (lbs/gal) 10.7 - 10.8 **Specific Gravity** 1.28 - 1.29

No information available Hq Viscosity (cps) No information available

Solubility No information available **Water Solubility** No information available **Evaporation Rate** No information available **Vapor Pressure** No information available

No information available **Vapor Density**

Wt. % Solids 70 - 80Vol. % Solids 55 - 65 20 - 30 Wt. % Volatiles Vol. % Volatiles 35 - 45 <340 VOC Regulatory Limit (g/L) **Boiling Point (°F)** 315

Freezing Point (°F) No information available Freezing Point (°C) No information available

Flash Point (°F) 104 Flash Point (°C) 40 Flash Point Method **PMCC**

Flammability (solid, gas) Not applicable

Upper Explosion Limit No information available **Lower Explosion Limit** No information available **Autoignition Temperature (°F)** No information available **Autoignition Temperature (°C)** No information available **Decomposition Temperature (°F)** No information available **Decomposition Temperature (°C)** No information available

Partition Coefficient (n-octanol/water)

No information available

10. STABILITY AND REACTIVITY

Reactivity Not Applicable

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.

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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.

Information on toxicological effects

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 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 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:
Neurological Effects
No information available.
Mutagenic Effects
No information available.

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

Contains: Crystalline Silica which has been determined to be carcinogenic to

humans by IARC (1) when in respirable form. Risk of cancer depends on duration and level of inhalation exposure to spray mist or dust from sanding the dried paint.

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No information available. No information available.

Aspiration HazardMay 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

STOT - single exposure

Other adverse effects

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

ATEmix (oral) 98037 mg/kg ATEmix (dermal) 45741 mg/kg

Component

Acute Toxicity

Limestone

LD50 Oral: 6,450 mg/kg (Rat) vendor data

Stoddard solvent

LD50 Oral: > 5,000 mg/kg (Rat) LD50 Dermal: > 3160 mg/kg (Rabbit) LC50 Inhalation (Vapor): > 6.1 mg/L (Rat) Distillates, petroleum, hydrotreated light

LD50 Oral: > 5,000 mg/kg (Rat) LD50 Dermal: > 3,000 mg/kg (Rabbit)

Titanium dioxide

LD50 Oral: > 10000 mg/kg (Rat)

LD50 Dermal: > 10000 mg/m³ (Rabbit)

LC50 Inhalation (Dust): > 6.82 mg/L (Rat, 4 hr.)

Carbon black

LD50 Oral: > 15400 mg/kg (Rat) LD50 Dermal: > 3000 mg/kg (Rabbit)

Silica, crystalline

LD50 Oral: mg/kg (Rat) vendor data

Carcinogenicity

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

Chemical Name	IARC NTP		OSHA Carcinogen	
	2B - Possible Human		Listed	
Titanium dioxide	Carcinogen			
	2B - Possible Human		Listed	
Carbon black	Carcinogen			
	1 - Human Carcinogen	Known Human	Listed	
Silica, crystalline		Carcinogen		
	2B - Possible Human			
Cobalt bis(2-ethylhexanoate)	Carcinogen			

Crystalline Silica has been determined to be carcinogenic to humans by IARC (1) when in respirable form. Risk of cancer depends on duration and level of inhalation exposure to spray mist or dust from sanding the dried paint.

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."

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.

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 / Accumulation

No information available.

Mobility in Environmental Media

No information available.

Ozone

No information available

Component

Acute Toxicity to Fish

Titanium dioxide

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

Acute Toxicity to Aquatic Invertebrates

No information available

Acute Toxicity to Aquatic Plants

No information available

13. DISPOSAL CONSIDERATIONS

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

Local requirements may vary, consult your sanitation department or

state-designated 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 III

Reportable Quantity (RQ) Xylenes mixed isomers: RQ kg= 45.40

Description UN1263, Paint, , 3, III, RQ

In the US this material may be reclassified as a Combustible Liquid and is not regulated in containers of less than 119 gallons (450 liters) via surface transportation (refer to 49CFR173.120(b)(2) for further information).

ICAO / IATA Contact the preparer for further information.

Contact the preparer for further information.

15. REGULATORY INFORMATION

International Inventories

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

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

IMDG / IMO

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 % (max)	Hazardous Air Pollutant
			(HAP)
Cobalt bis(2-ethylhexanoate)	136-52-7	0.5	Listed

State Regulations

California Proposition 65

This product may contain small amounts of materials known to the state of California to cause cancer or reproductive harm.

State Right-to-Know

Chemical Name	Massachusetts	New Jersey	Pennsylvania
Limestone	X	X	X
Stoddard solvent	X	X	X
Talc	X	X	X
Titanium dioxide	X	X	X
Carbon black	X	X	X
Silica, crystalline	X	X	X
Cobalt bis(2-ethylhexanoate)		X	X

Legend

X - Listed

16. OTHER INFORMATION

HMIS - Health: 1* Flammability: 2 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.

Prepared By Product Stewardship Department

Benjamin Moore & Co. 101 Paragon Drive Montvale, NJ 07645 855-724-6802

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Disclaimer

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END OF SAFETY DATA SHEET