


SAFETY DATA SHEET

Revision Date: 05-Jan-2016

Revision Number: 1

1. PRODUCT AND COMPANY IDENTIFICATION

| | |
|------------------------|--|
| Product Name | HEAVY DUTY URETHANE MODIFIED ALKYD ENAMEL OSHA BLUE |
| Product Code | G400-66 |
| Alternate Product Code | TJ0466 |
| Product Class | SOLVENT THINNED PAINT |
| Color | Blue |
| Recommended use | Rust preventative |
| Restrictions on use | No information available |

| | |
|--|--|
| Manufacturer | Emergency Telephone Number(s) |
| Benjamin Moore & Co. 101 Paragon Drive Montvale, NJ 07645 Phone: 800-225-5554 insl-x.com | 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)

| | |
|--|------------|
| 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



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/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 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

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) |
|---------------|--------|----------------|
|---------------|--------|----------------|

| | | |
|--|------------|-----|
| Stoddard solvent | 8052-41-3 | 25 |
| Kaolin | 1332-58-7 | 10 |
| Limestone | 1317-65-3 | 10 |
| Titanium dioxide | 13463-67-7 | 5 |
| Solvent naphtha, petroleum, light aromatic | 64742-95-6 | 5 |
| Hydrotreated heavy naphtha, petroleum | 64742-48-9 | 5 |
| Solvent naphtha, petroleum, medium aliphatic | 64742-88-7 | 5 |
| Methyl ethyl ketoxime | 96-29-7 | 0.5 |
| Cobalt bis(2-ethylhexanoate) | 136-52-7 | 0.5 |
| Ethyl benzene | 100-41-4 | 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 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. 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

| | |
|--|--|
| 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 Limit | Not available |
| Upper Explosion Limit | Not 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 Precautions Use 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 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

Handling Use 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.

Incompatible Materials Incompatible with strong acids and bases and strong oxidizing agents.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits

| Chemical Name | ACGIH | OSHA |
|----------------------|----------------------------|---|
| Stoddard solvent | 100 ppm - TWA | 2900 mg/m ³ - TWA 500 ppm - TWA |
| Kaolin | 2 mg/m ³ - TWA | 15 mg/m ³ - TWA total 5 mg/m ³ - TWA |
| Limestone | N/E | 15 mg/m ³ - TWA total 5 mg/m ³ - TWA |
| Titanium dioxide | 10 mg/m ³ - TWA | 15 mg/m ³ - TWA |
| Ethyl benzene | 20 ppm - TWA | 100 ppm - TWA 435 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**

Safety glasses with side-shields.

Skin Protection

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 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**Appearance**

liquid

Odor

solvent

Odor Threshold

No information available

Density (lbs/gal)

8.8 - 8.9

Specific Gravity

1.05 - 1.07

pH

No information available

Viscosity (cps)

No information available

Solubility

No information available

Water Solubility

No information available

Evaporation Rate

No information available

Vapor Pressure

No information available

Vapor Density

No information available

Wt. % Solids

65 - 75

Vol. % Solids

50 - 60

Wt. % Volatiles

25 - 35

Vol. % Volatiles

40 - 50

VOC Regulatory Limit (g/L)

<340

Boiling Point (°F)

300

Boiling Point (°C)

149

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. |
| 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: | May cause an allergic skin reaction. |
| Neurological Effects | No information available. |
| 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. |
| 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) | 112828 mg/kg |
| ATEmix (dermal) | 61765 mg/kg |

Component

Acute Toxicity

Stoddard solvent

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

Kaolin

LD50 Oral: > 5000 mg/kg (Rat)

Limestone

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

Titanium dioxide

LD50 Oral: > 10000 mg/kg (Rat)
LD50 Dermal: > 10000 mg/m³ (Rabbit)
LC50 Inhalation (Dust): > 6.82 mg/L (Rat, 4 hr.)

Solvent naphtha, petroleum, light aromatic

LD50 Oral: 8400 mg/kg (Rat)

Hydrotreated heavy naphtha, petroleum

LD50 Oral: > 5,000 mg/kg (Rat) vendor data
LD50 Dermal: > 3,160 mg/kg (Rabbit)
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.)

Methyl ethyl ketoxime

LD50 Oral: 930 mg/kg (Rat)

LD50 Dermal: 200 µL/kg (Rabbit)

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

Ethyl benzene

LD50 Oral: 3500 mg/kg (Rat)

LD50 Dermal: > 5000 mg/kg (Rabbit)

LC50 Inhalation (Vapor): 55000 mg/m³ (Rat, 2 hr.)

Carcinogenicity

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

| Chemical Name | IARC | NTP | OSHA Carcinogen |
|---------------|------|-----|-----------------|
|---------------|------|-----|-----------------|

| | | | |
|------------------------------|--------------------------------|--|--------|
| Titanium dioxide | 2B - Possible Human Carcinogen | | Listed |
| Cobalt bis(2-ethylhexanoate) | 2B - Possible Human Carcinogen | | |
| Ethyl benzene | 2B - Possible Human Carcinogen | | Listed |

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.)

Methyl ethyl ketoxime

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

Ethyl benzene

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

Acute Toxicity to Aquatic Invertebrates

Methyl ethyl ketoxime

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

Ethyl benzene

EC50: 1.8 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, 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.

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 | 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:

| <u>Chemical Name</u> | <u>CAS-No</u> | <u>Weight % (max)</u> | <u>CERCLA/SARA 313 (de minimis concentration)</u> |
|----------------------|---------------|-----------------------|---|
| 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:

| <u>Chemical Name</u> | <u>CAS-No</u> | <u>Weight % (max)</u> | <u>Hazardous Air Pollutant (HAP)</u> |
|------------------------------|---------------|-----------------------|--|
| Cobalt bis(2-ethylhexanoate) | 136-52-7 | 0.5 | Listed |
| Ethyl benzene | 100-41-4 | 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

| <u>Chemical Name</u> | <u>Massachusetts</u> | <u>New Jersey</u> | <u>Pennsylvania</u> |
|--|----------------------|-------------------|---------------------|
| Stoddard solvent | X | X | X |
| Kaolin | X | X | X |
| Limestone | X | X | X |
| Titanium dioxide | X | X | X |
| Solvent naphtha, petroleum, medium aliphatic | | X | |
| Cobalt bis(2-ethylhexanoate) | | X | X |
| Ethyl benzene | X | 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

Revision Date:

05-Jan-2016

Revision Summary

Not available

Disclaimer

The information contained herein is presented in good faith and believed to be accurate as of the effective date shown above. This information is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determination of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. Any use of this data and information must be determined by the user to be in accordance with applicable federal, provincial, and local laws and regulations.

END OF SAFETY DATA SHEET