Material Safety Data Sheet

Revision Date: *02-Mar-2009* **Revision Number:** *2*

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name **B.M. COLLECTION ALKYD HIGH GLOSS ENAMEL**
Product Code **K13333**
Product Class SOLVENT THINNED PAINT
Color Blue

Manufacturer
Benjamin Moore & Co.
101 Paragon Drive
Montvale, NJ 07645
Phone: 201-573-9600
www.benjaminmoore.com

Emergency Telephone Number(s)
CANUTEC: 613-996-6666

2. COMPOSITION INFORMATION ON COMPONENTS

Hazardous Components

Chemical Name	CAS-No	Weight % (max)
Hydrotreated heavy naphtha, petroleum	64742-48-9	30 - 60%
Solvent naphtha, petroleum, medium aliphatic	64742-88-7	15 - 40%
Titanium dioxide	13463-67-7	3 - 7%
Ethyl benzene	100-41-4	0.1 - 1.0%

3. HAZARDS IDENTIFICATION

Emergency Overview

WARNING

Vapors may be irritating to eyes, nose, throat, and lungs. May cause skin irritation and/or dermatitis.
Combustible material.
Rags, steel wool or waste soaked with this product may spontaneously catch fire if improperly discarded.

Appearance liquid **Odor** Not available

Potential Health Effects

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

Acute Effects

Eyes Contact with eyes may cause irritation.

Skin May cause skin irritation and/or dermatitis.

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.

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.

Chronic Effects Avoid repeated exposure

See Section 11 for additional Toxicological information.

Aggravated Medical Conditions None known

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, Benjamin Moore & Co., has choosen 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.

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.

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.
Notes To Physician	Treat symptomatically
Protection Of First-Aiders	Use personal protective equipment

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)	110
Flash Point (°C)	43
Flash Point Method	PMCC
Flammability Limits In Air	
Upper Explosion Limit	Not available
Lower 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 by Benjamin Moore & Co. 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.

Environmental Precautions 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.

Methods For Clean-Up Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly.

Other Information None known

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 in properly labeled containers.

Storage (additional)

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

Hazardous Components

Chemical Name	ACGIH	Alberta	British Columbia	Ontario	Quebec
Hydrotreated heavy naphtha, petroleum	N/E	N/E	N/E	N/E	N/E
Solvent naphtha, petroleum, medium aliphatic	N/E	N/E	N/E	525 mg/m^3 - TWAEV	N/E
Titanium dioxide	10 mg/m^3 - TWA	10 mg/m^3 - TWA	10 mg/m^3 - TWA 3 mg/m^3 - TWA	10 mg/m^3 - TWAEV	10 mg/m^3 - TWAEV
Ethyl benzene	100 ppm - TWA 125 ppm - STEL	100 ppm - TWA 434 mg/m^3 - TWA 543 mg/m^3 - STEL 125 ppm - STEL	100 ppm - TWA 125 ppm - STEL	100 ppm - TWAEV 435 mg/m^3 - TWAEV 125 ppm - STEV 540 mg/m^3 - STEV	100 ppm - TWAEV 434 mg/m^3 - TWAEV 543 mg/m^3 - STEV 125 ppm - STEV

Legend
ACGIH - American Conference of Governmental Industrial Hygienists
Alberta - Alberta Occupational Exposure Limits
British Columbia - British Columbia Occupational Exposure Limits
Ontario - Ontario Occupational Exposure Limits
Quebec - Quebec Occupational 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	Not available
Density (lbs/gal)	7.59
Specific Gravity	0.91
pH	Not available
Viscosity (centistokes)	Not available
Evaporation Rate	Not available
Vapor Pressure	Not available
Vapor Density	Not available
Wt. % Solids	45 - 55
Vol. % Solids	35 - 45
Wt. % Volatiles	45 - 55
Vol. % Volatiles	55 - 65
VOC (g/L)	Not applicable
Boiling Point (°F)	340
Boiling Point (°C)	171
Freezing Point (°F)	Not available
Freezing Point (°C)	Not available
Flash Point (°F)	110
Flash Point (°C)	43
Flash Point Method	PMCC
Upper Explosion Limit	Not available
Lower Explosion Limit	Not available

10. STABILITY AND REACTIVITY

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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

Acute Toxicity

Product
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.

Component

Hydrotreated heavy naphtha, petroleum
LD50 Oral: > 5,000 mg/kg (Rat) vendor data
LD50 Dermal: > 3,000 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.)

Titanium dioxide
LD50 Oral: > 24000 mg/kg (Rat)
LD50 Dermal: > 10000 mg/m³ (Rabbit)
LC50 Inhalation (Dust): > 6.82 mg/L (Rat, 4 hr.)

Ethyl benzene
LD50 Oral: 3500 mg/kg (Rat)
LD50 Dermal: 17800 µg/L (Rabbit)
LC50 Inhalation (Vapor): 55000 mg/m^3 (Rat, 2 hr.)

Chronic Toxicity

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

Chemical Name	ACGIH	IARC	NTP	OSHA Carcinogen
Titanium dioxide		2B - Possible Human Carcinogen		Listed
Ethyl benzene	A3	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."

Legend
ACGIH - American Conference of Governmental Industrial Hygienists
IARC - International Agency for Research on Cancer
NTP - National Toxicity Program
OSHA - Occupational Safety & Health Administration

12. ECOLOGICAL INFORMATION

Ecotoxicity Effects

Product
Acute Toxicity to Fish
No information available

Acute Toxicity to Aquatic Invertebrates
No information available

Acute Toxicity to Aquatic Plants
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

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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.

14. TRANSPORT INFORMATION

TDG Not regulated in small containers.

ICAO / IATA Contact Benjamin Moore & Co. for further information.

IMDG / IMO Contact Benjamin Moore & Co. for further information.

15. REGULATORY INFORMATION

International Inventories

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

National Pollutant Release Inventory (NPRI)

NPRI Parts 1- 4
This product contains the following Parts 1-4 NPRI chemicals:

Chemical Name	CAS-No	Weight % (max)
Hydrotreated heavy naphtha, petroleum	64742-48-9	30 - 60%
Solvent naphtha, petroleum, medium aliphatic	64742-88-7	15 - 40%
Ethyl benzene	100-41-4	0.1 - 1.0%

This product may contain trace amounts of (other) NPRI Parts I-4 reportable chemicals. Contact Benjamin Moore & Co. for further information.

NPRI Part 5
This product contains the following NPRI Part 5 Chemicals:

Chemical Name	CAS-No	Weight % (max)
Hydrotreated heavy naphtha, petroleum	64742-48-9	30 - 60%
Solvent naphtha, petroleum, medium aliphatic	64742-88-7	15 - 40%

This product may contain trace amounts of (other) NPRI Part 5 reportable chemicals. Contact Benjamin Moore & Co. for further information.

WHMIS Regulatory Status
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class
B3 Combustible liquid
D2A Very toxic materials

16. OTHER INFORMATION

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 logging onto Health Canada @ http://www.hc-sc.gc.ca/iyh-vsv/prod/paint-peinture_e.html.

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Disclaimer

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End of MSDS