



# Benjamin Moore®

## SAFETY DATA SHEET

Revision Date: 28-Aug-2023

Revision Number: 1

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name** HP ALIPHATIC URETHANE - DEEP BASE  
**Product Code** HP5000-8BFR  
**Alternate Product Code** UF578B  
**Product Class** FINISH COATING  
**Color** All  
**Recommended use** Industrial paint  
**Restrictions on use** No information available

#### **Manufactured For**

Benjamin Moore & Co., Limited  
8775 Keele Street  
Concord ON L4K 2N1  
Phone: 1-800-361-5898  
www.benjaminmoore.com/en-ca

#### **Manufacturer**

Benjamin Moore & Co.  
101 Paragon Drive  
Montvale, NJ 07645  
Phone: 1-866-708-9180  
www.benjaminmoore.com

#### **Emergency Telephone**

CHEMTREC: +1 703-741-5970 / 1-800-424-9300  
+1 703-527-3887 (outside US & Canada)  
CANUTEC: 613-996-6666 (Transport Emergency Only)

### 2. HAZARDS IDENTIFICATION

#### **Classification**

This chemical is considered hazardous by the Hazardous Products Regulations (HPR: SOR/2015-17)

Skin sensitization	Category 1A
Germ cell mutagenicity	Category 1B
Carcinogenicity	Category 1A
Flammable liquids	Category 3

#### **Label elements**

##### **Danger**

##### **Hazard statements**

May cause an allergic skin reaction  
May cause genetic defects  
May cause cancer  
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  
Avoid breathing dust/fume/gas/mist/vapors/spray  
Contaminated work clothing should not be allowed out of the workplace  
Wear protective gloves  
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking  
Keep container tightly closed  
Ground and bond container and receiving equipment  
Use only non-sparking tools  
Take action to prevent static discharges

**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

**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

**Other information**

No information available

**CAUTION:** All floor coatings may become slippery when wet. Where non-skid characteristics are desired, use an appropriate anti-slip aggregate.

**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-%	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
2-Heptanone	110-43-0	10 - 30%	-	-
Barium sulfate	7727-43-7	10 - 30%	-	-
Titanium dioxide	13463-67-7	10 - 30%	-	-
n-Butyl acetate	123-86-4	1 - 5%	-	-
Decanedioic acid, bis(1,2,2,6,6-pentamethyl-4-piperidinyloxy) ester	41556-26-7	0.25 - 0.5%	-	-
Silica, crystalline	14808-60-7	0.25 - 0.5%	-	-
Ethyl benzene	100-41-4	0.1 - 0.25%	-	-
2-(Hydroxyethyl)Methacrylate	868-77-9	0.1 - 0.25%	-	-

**Confidential Business Information note**

\*The exact percentage (concentration) of composition has been withheld as a trade secret

#### 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 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.

<b>Suitable Extinguishing Media</b>	Foam, dry powder or water. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
<b>Protective equipment and precautions for firefighters</b>	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.
<b>Hazardous combustion products</b>	Burning may result in carbon dioxide, carbon monoxide and other combustion products of varying composition which may be toxic and/or irritating.
<b>Specific Hazards Arising From The Chemical</b>	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.
<b>Sensitivity to mechanical impact</b>	No
<b>Sensitivity to static discharge</b>	Yes
<b>Flash Point Data</b>	
Flash point (°F)	98
Flash Point (°C)	37
Method	PMCC
<b>Flammability Limits In Air</b>	
Lower flammability limit:	No data available
Upper flammability limit:	No data available
<b>NFPA</b>	
Health hazards	1
Flammability	3
Stability	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](http://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.

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.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Exposure Limits**

Chemical name	ACGIH TLV	Alberta	British Columbia	Ontario	Quebec
2-Heptanone	TWA: 50 ppm	50 ppm - TWA	50 ppm - TWA	25 ppm - TWA	50 ppm - TWAEV

		233 mg/m <sup>3</sup> - TWA		115 mg/m <sup>3</sup> - TWA	233 mg/m <sup>3</sup> - TWAEV
Barium sulfate	TWA: 5 mg/m <sup>3</sup> inhalable particulate matter, particulate matter containing no asbestos and <1% crystalline silica TWA: 0.5 mg/m <sup>3</sup> Ba As Barium soluble compounds [RR-00049-7]	10 mg/m <sup>3</sup> - TWA	5 mg/m <sup>3</sup> - TWA	5 mg/m <sup>3</sup> - TWA	10 mg/m <sup>3</sup> - TWAEV 5 mg/m <sup>3</sup> - TWAEV
Titanium dioxide	TWA: 0.2 mg/m <sup>3</sup> nanoscale respirable particulate matter TWA: 2.5 mg/m <sup>3</sup> finescale respirable particulate matter	10 mg/m <sup>3</sup> - TWA	10 mg/m <sup>3</sup> - TWA 3 mg/m <sup>3</sup> - TWA	10 mg/m <sup>3</sup> - TWA	10 mg/m <sup>3</sup> - TWAEV
n-Butyl acetate	STEL: 150 ppm TWA: 50 ppm	150 ppm - TWA 713 mg/m <sup>3</sup> - TWA 200 ppm - STEL 950 mg/m <sup>3</sup> - STEL	20 ppm - TWA	150 ppm - TWA 200 ppm - STEL	150 ppm - TWAEV 713 mg/m <sup>3</sup> - TWAEV 200 ppm - STEV 950 mg/m <sup>3</sup> - STEV
Silica, crystalline	TWA: 0.025 mg/m <sup>3</sup> respirable particulate matter	TWA: 0.025 mg/m <sup>3</sup>	TWA: 0.025 mg/m <sup>3</sup>	TWA: 0.10 mg/m <sup>3</sup>	TWA: 0.1 mg/m <sup>3</sup>
Ethyl benzene	Ototoxicant - potential to cause hearing disorders TWA: 20 ppm	100 ppm - TWA 434 mg/m <sup>3</sup> - TWA 125 ppm - STEL 543 mg/m <sup>3</sup> - STEL	20 ppm - TWA	20 ppm - TWA	100 ppm - TWAEV 434 mg/m <sup>3</sup> - TWAEV 125 ppm - STEV 543 mg/m <sup>3</sup> - 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**

Tightly fitting safety goggles If splashes are likely to occur, wear: Safety glasses with side-shields

**Skin Protection**

Protective gloves and impervious clothing.

**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 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)	10.6 - 11.0
Specific Gravity	1.27 - 1.32
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
Relative vapor density	No information available
Wt. % Solids	75 - 85
Vol. % Solids	60 - 70
Wt. % Volatiles	15 - 25
Vol. % Volatiles	30 - 40
VOC Regulatory Limit (g/L)	< 250
Boiling Point (°F)	223
Boiling Point (°C)	106
Freezing point (°F)	No information available
Freezing Point (°C)	No information available
Flash point (°F)	98
Flash Point (°C)	37
Method	PMCC
Flammability (solid, gas)	Not applicable
Upper flammability limit:	Not applicable
Lower flammability limit:	Not applicable
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	No information available

## 10. STABILITY AND REACTIVITY

<b>Reactivity</b>	Not Applicable
<b>Chemical Stability</b>	Stable under normal conditions. Hazardous polymerisation does not occur.
<b>Conditions to avoid</b>	Keep away from open flames, hot surfaces, static electricity and sources of ignition. Sparks. Elevated temperature.
<b>Incompatible Materials</b>	Incompatible with strong acids and bases and strong oxidizing agents.
<b>Hazardous Decomposition Products</b>	Thermal decomposition can lead to release of irritating gases and vapors.
<b>Possibility of hazardous reactions</b>	None under normal conditions of use.

## 11. TOXICOLOGICAL INFORMATION

### Product Information

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**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.

**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.

**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.

**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 - single exposure**

May cause disorder and damage to the, Respiratory system, Central nervous system.

**STOT - repeated exposure**

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

**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)**

8117 mg/kg

**ATEmix (inhalation-dust/mist)**

8.7 mg/l

**ATEmix (inhalation-vapor)**

64 mg/l

**Component Information**



Caution - This mixture contains a substance not yet fully tested

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
2-Heptanone 110-43-0	= 1600 mg/kg ( Rat )	= 12.6 mL/kg ( Rabbit ) = 12600 µL/kg ( Rabbit )	>16.7 mg/L
Barium sulfate 7727-43-7	= 307000 mg/kg ( Rat )	-	-
Titanium dioxide 13463-67-7	> 10000 mg/kg ( Rat )	-	-
n-Butyl acetate 123-86-4	= 10768 mg/kg ( Rat )	> 17600 mg/kg ( Rabbit )	-
Decanedioic acid, bis(1,2,2,6,6-pentamethyl-4-piperidi nyl) ester 41556-26-7	= 2615 mg/kg ( Rat )	-	-
Ethyl benzene 100-41-4	= 3500 mg/kg ( Rat )	= 15400 mg/kg ( Rabbit )	= 17.4 mg/L ( Rat ) 4 h
2-(Hydroxyethyl)Methacrylate 868-77-9	= 5050 mg/kg ( Rat )	> 3000 mg/kg ( Rabbit )	-

### Chronic Toxicity

#### **Carcinogenicity**

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

Chemical name	IARC	NTP
Titanium dioxide	2B - Possible Human Carcinogen	
Silica, crystalline	1 - Human Carcinogen	Known
Ethyl benzene	2B - Possible Human 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."

#### **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**

Titanium dioxide

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

n-Butyl acetate

LC50: 18 mg/L (Fathead Minnow - 96 hr.)

Ethyl benzene

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

**Acute Toxicity to Aquatic Invertebrates**

n-Butyl acetate

EC50: 72.8 mg/L (Daphnia magna - 48 hr.)

Ethyl benzene

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

**Acute Toxicity to Aquatic Plants**

n-Butyl acetate

EC50: 674.7 mg/L (Green algae (Scenedesmus subspicatus), 72 hrs.)

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**

**TDG**

**Proper Shipping Name** Paint  
**Transport hazard class(es)** 3  
**UN-No** UN1263  
**Packing Group** III  
**Description** UN1263, Paint, 3, III

**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.

**National Pollutant Release Inventory (NPRI)**

**NPRI Parts 1- 4**

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

<u>Chemical name</u>	<u>CAS No</u>	<u>Weight-%</u>	<u>NPRI Parts 1- 4</u>
Ethyl benzene	100-41-4	0.1 - 0.25%	Listed

**NPRI Part 5**

This product contains the following NPRI Part 5 Chemicals:

<u>Chemical name</u>	<u>CAS No</u>	<u>Weight-%</u>	<u>NPRI Part 5</u>
n-Butyl acetate	123-86-4	1 - 5%	Listed

**WHMIS Regulatory Status**

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR

**16. OTHER INFORMATION**

**HMIS**

Health hazards	1*
Flammability	3
Reactivity:	0
Personal protection	-

**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 logging onto Health Canada at [http://www.hc-sc.gc.ca/ewh-semt/contaminants/lead-plomb/asked\\_questions-questions\\_posees-eng.php](http://www.hc-sc.gc.ca/ewh-semt/contaminants/lead-plomb/asked_questions-questions_posees-eng.php).

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**Revision Date:** 28-Aug-2023  
**Reason for revision** Not available

**Disclaimer**

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**End of Safety Data Sheet**