



Benjamin Moore®

SAFETY DATA SHEET

Revision Date: 28-Aug-2023

Revision Number: 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name HP ALIPHATIC URETHANE - WHITE
Product Code HP5000-01FR
Alternate Product Code UF5701
Product Class FINISH COATING
Color White
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
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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
Reproductive toxicity	Category 2
Specific target organ toxicity (repeated exposure)	Category 2
Flammable liquids	Category 3

Label elements

Danger

Hazard statements

May cause an allergic skin reaction

May cause genetic defects
May cause cancer
Suspected of damaging fertility or the unborn child
May cause damage to organs through prolonged or repeated exposure
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/gas/mist/vapors/spray
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)
Titanium dioxide	13463-67-7	10 - 30%	-	-
2-Heptanone	110-43-0	10 - 30%	-	-
Barium sulfate	7727-43-7	7 - 13%	-	-
n-Butyl acetate	123-86-4	1 - 5%	-	-
Xylene	1330-20-7	1 - 5%	-	-
Ethyl benzene	100-41-4	0.25 - 0.5%	-	-
Decanedioic acid, bis(1,2,2,6,6-pentamethyl-4-piperidiny) ester	41556-26-7	0.25 - 0.5%	-	-
Silica, crystalline	14808-60-7	0.1 - 0.25%	-	-
2-(Hydroxyethyl)Methacrylate	868-77-9	0.1 - 0.25%	-	-
Trimethylolpropane	77-99-6	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.
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.
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)	98
Flash Point (°C)	37
Method	PMCC
Flammability Limits In Air	
Lower flammability limit:	No data available
Upper flammability limit:	No data available
NFPA	
Health hazards	2
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.

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.

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
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Titanium dioxide	TWA: 0.2 mg/m ³ nanoscale respirable particulate matter TWA: 2.5 mg/m ³ finescale respirable particulate matter	10 mg/m ³ - TWA	10 mg/m ³ - TWA 3 mg/m ³ - TWA	10 mg/m ³ - TWA	10 mg/m ³ - TWAEV
2-Heptanone	TWA: 50 ppm	50 ppm - TWA 233 mg/m ³ - TWA	50 ppm - TWA	25 ppm - TWA 115 mg/m ³ - TWA	50 ppm - TWAEV 233 mg/m ³ - TWAEV
Barium sulfate	TWA: 5 mg/m ³ inhalable particulate matter, particulate matter containing no asbestos and <1% crystalline silica TWA: 0.5 mg/m ³ Ba As Barium soluble compounds [RR-00049-7]	10 mg/m ³ - TWA	5 mg/m ³ - TWA	5 mg/m ³ - TWA	10 mg/m ³ - TWAEV 5 mg/m ³ - TWAEV
n-Butyl acetate	STEL: 150 ppm TWA: 50 ppm	150 ppm - TWA 713 mg/m ³ - TWA 200 ppm - STEL 950 mg/m ³ - STEL	20 ppm - TWA	150 ppm - TWA 200 ppm - STEL	150 ppm - TWAEV 713 mg/m ³ - TWAEV 200 ppm - STEV 950 mg/m ³ - STEV
Xylene	TWA: 20 ppm	100 ppm - TWA 434 mg/m ³ - TWA 150 ppm - STEL 651 mg/m ³ - STEL	100 ppm - TWA 150 ppm - STEL	100 ppm - TWA 150 ppm - STEL	100 ppm - TWAEV 434 mg/m ³ - TWAEV 150 ppm - STEV 651 mg/m ³ - STEV
Ethyl benzene	Ototoxicant - potential to cause hearing disorders TWA: 20 ppm	100 ppm - TWA 434 mg/m ³ - TWA 125 ppm - STEL 543 mg/m ³ - STEL	20 ppm - TWA	20 ppm - TWA	100 ppm - TWAEV 434 mg/m ³ - TWAEV 125 ppm - STEV 543 mg/m ³ - STEV
Silica, crystalline	TWA: 0.025 mg/m ³ respirable particulate matter	TWA: 0.025 mg/m ³	TWA: 0.025 mg/m ³	TWA: 0.10 mg/m ³	TWA: 0.1 mg/m ³

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)	11.1 - 11.5
Specific Gravity	1.33 - 1.38
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

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. Sparks. Elevated 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.

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

Possible risk of impaired fertility. Possible risk of harm to the unborn child.

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, Causes damage to organs through prolonged or repeated exposure.

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)

7718 mg/kg

ATEmix (inhalation-dust/mist)

8.6 mg/l

ATEmix (inhalation-vapor)

65.7 mg/l

Component Information

Caution - This mixture contains a substance not yet fully tested

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Titanium dioxide 13463-67-7	> 10000 mg/kg (Rat)	-	-
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)	-	-
n-Butyl acetate 123-86-4	= 10768 mg/kg (Rat)	> 17600 mg/kg (Rabbit)	-
Xylene 1330-20-7	= 3500 mg/kg (Rat)	> 4350 mg/kg (Rabbit)	= 29.08 mg/L (Rat) 4 h
Ethyl benzene 100-41-4	= 3500 mg/kg (Rat)	= 15400 mg/kg (Rabbit)	= 17.4 mg/L (Rat) 4 h
Decanedioic acid, bis(1,2,2,6,6-pentamethyl-4-piperidi nyl) ester 41556-26-7	= 2615 mg/kg (Rat)	-	-
2-(Hydroxyethyl)Methacrylate 868-77-9	= 5050 mg/kg (Rat)	> 3000 mg/kg (Rabbit)	-
Trimethylolpropane 77-99-6	= 14100 mg/kg (Rat) = 14000 mg/kg (Rat)	-	> 0.29 mg/L (Rat) 4 h

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	
Ethyl benzene	2B - Possible Human Carcinogen	
Silica, crystalline	1 - Human Carcinogen	Known

- 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.)

Xylene

LC50: 13.5 mg/L (Rainbow Trout - 96 hr.)

Ethyl benzene

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

Acute Toxicity to Aquatic Invertebratesn-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 Plantsn-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>
Xylene	1330-20-7	1 - 5%	Listed
Ethyl benzene	100-41-4	0.25 - 0.5%	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
Xylene	1330-20-7	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	2*
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.

Prepared By Product Stewardship Department
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Reason for revision Not available

Disclaimer

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End of Safety Data Sheet