



SAFETY DATA SHEET

Revision Date: 28-Aug-2023

Revision Number: 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	HP ALIPHATIC URETHANE - CLEAR
Product Code	HP500-00
Alternate Product Code	UA5700
Product Class	FINISH COATING
Color	Clear
Recommended use	Industrial paint
Restrictions on use	No information available

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)

2. HAZARDS IDENTIFICATION

Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin sensitization	Category 1A
Germ cell mutagenicity	Category 1B
Carcinogenicity	Category 2
Specific target organ toxicity (single exposure)	Category 3
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
Suspected of causing cancer
May cause respiratory irritation
May cause drowsiness or dizziness
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

Use only outdoors or in a well-ventilated area

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

Keep cool

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

Inhalation

IF INHALED: Remove person to fresh air and keep comfortable for breathing

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 container tightly closed

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

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-%
2-Heptanone	110-43-0	20 - 25
n-Butyl acetate	123-86-4	1 - 5
Xylene	1330-20-7	1 - 5
Decanedioic acid, bis(1,2,2,6,6-pentamethyl-4-piperidinyl) ester	41556-26-7	0.1 - 0.5
Ethyl benzene	100-41-4	0.1 - 0.5
2-(Hydroxyethyl)Methacrylate	868-77-9	0.1 - 0.5
Decanedioic acid, methyl 1,2,2,6,6-pentamethyl-4-piperidinyl ester	82919-37-7	0.1 - 0.5

4. FIRST AID MEASURES

Description of 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	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.

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.
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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.

Technical measures/Precautions Ensure adequate ventilation. Use only where airflow will keep vapors from building up in or near the work area in adjoining rooms. Comply with all national, state, and local codes pertaining to the storage, handling, dispensing and disposal of flammable liquids.

Dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. All equipment should be non-sparking and explosion proof. Use explosion proof electrical equipment for ventilation, lighting and material handling.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Exposure Limits**

Chemical name	ACGIH TLV	OSHA PEL
2-Heptanone	TWA: 50 ppm	100 ppm - TWA 465 mg/m ³ - TWA
n-Butyl acetate	STEL: 150 ppm TWA: 50 ppm	150 ppm - TWA 710 mg/m ³ - TWA
Xylene	TWA: 20 ppm	100 ppm - TWA 435 mg/m ³ - TWA
Ethyl benzene	Ototoxicant - potential to cause hearing disorders TWA: 20 ppm	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

Appropriate engineering controls

Engineering Measures	Ensure adequate ventilation, especially in confined areas.
<u>Personal Protective Equipment</u>	
Eye/Face Protection	Tightly fitting safety goggles. Safety glasses with side-shields. If splashes are likely to occur, wear:.
Skin Protection	Long sleeved clothing. Protective gloves.
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)	8.3 - 8.6
Specific Gravity	0.99 - 1.03
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	65 - 75
Vol. % Solids	55 - 65
Wt. % Volatiles	25 - 35
Vol. % Volatiles	35 - 45
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:	No data available
Lower flammability limit:	No data 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	No information available

10. STABILITY AND REACTIVITY

Reactivity	No data available
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.
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.
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.

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	Causes damage to organs through prolonged or repeated exposure.
STOT - single exposure	May cause disorder and damage to the, Respiratory system, Central nervous system.
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)	6146 mg/kg
ATEmix (inhalation-dust/mist)	5.7 mg/l
ATEmix (inhalation-vapor)	43.3 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
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
Decanedioic acid, bis(1,2,2,6,6-pentamethyl-4-piperidinyl) 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	OSHA
Ethyl benzene	2B - Possible Human Carcinogen		Listed

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 classified

Component Information**Acute Toxicity to Fish**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, 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
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.

Federal Regulations

SARA 311/312 Hazard Categories

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-%</u>	<u>CERCLA/SARA 313 (de minimis concentration)</u>
Xylene	1330-20-7	1 - 5	1.0
Ethyl benzene	100-41-4	0.1 - 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-%</u>	<u>Hazardous Air Pollutant (HAP)</u>
Xylene	1330-20-7	1 - 5	Listed
Ethyl benzene	100-41-4	0.1 - 0.5	Listed

US State Regulations

California Proposition 65

 **WARNING:** This product can expose you to chemicals including Ethyl benzene, which are known to the State of California to cause cancer, and Toluene which are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

U.S. State Right-to-Know

Regulations

<u>Chemical name</u>	<u>Massachusetts</u>	<u>New Jersey</u>	<u>Pennsylvania</u>
2-Heptanone	X	X	X
n-Butyl acetate	X	X	X
Xylene	X	X	X

Legend

X - Listed

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 NCPA. 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

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Revision Summary

Not available

Disclaimer

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End of Safety Data Sheet