



Benjamin Moore®

SAFETY DATA SHEET

Revision Date: 07-May-2025

Revision Number: 2

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name HP ALKYD URETHANE ENAMEL SATIN - DEEP BASE
Product Code HP2220-8B
Alternate Product Code UA628B
Product Class SOLVENT THINNED PAINT
Color All
Recommended use 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 considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin sensitization	Category 1
Germ cell mutagenicity	Category 1B
Carcinogenicity	Category 1B
Reproductive toxicity	Category 1B
Specific target organ toxicity (repeated exposure)	Category 1
Aspiration hazard	Category 1
Flammable liquids	Category 3

Label elements

Danger

Hazard statements

May cause an allergic skin reaction
May cause genetic defects
May cause cancer
May damage fertility or the unborn child
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/gas/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, 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

Ingestion

IF SWALLOWED: Immediately call a POISON CENTER or doctor/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)

Rags, steel wool or waste soaked with this product may spontaneously catch fire if improperly discarded

Other information

No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No.	Weight-%
Nepheline syenite	37244-96-5	25 - 30
Distillates, petroleum, hydrotreated light	64742-47-8	10 - 15
Solvent naphtha, petroleum, medium aliphatic	64742-88-7	5 - 10
Zinc oxide	1314-13-2	1 - 5
Titanium dioxide	13463-67-7	1 - 5
Zinc phosphate	7779-90-0	1 - 5
Stoddard solvent	8052-41-3	1 - 5
1H-imidazole-1-ethanol, 2-(8-heptadecenyl)-4,5-dihydro-	95-38-5	0.5 - 1
Ethyl benzene	100-41-4	0.1 - 0.5
Cobalt bis(2-ethylhexanoate)	136-52-7	0.1 - 0.5
Methyl ethyl ketoxime	96-29-7	0.1 - 0.5
1,2,4-Trimethylbenzene	95-63-6	0.1 - 0.5
Carbamic acid, 1H-benzimidazol-2-yl-, methyl ester	10605-21-7	0.1 - 0.5

4. FIRST AID MEASURES

General Advice

If symptoms persist, call a physician. Show this safety data sheet to the doctor in attendance. Immediate medical attention is required. 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. For severe burns, immediate medical attention is required.

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)	105
Flash Point (°C)	41
Method	PMCC
Flammability Limits In Air	
Lower flammability limit:	No data available
Upper flammability limit:	No data available
NFPA	
Health hazards	2
Flammability	2
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	Use personal protective equipment. Remove all sources of ignition.
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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. 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.
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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL
Zinc oxide	STEL: 10 mg/m ³ respirable particulate matter TWA: 2 mg/m ³ respirable particulate matter TWA: 0.5 mg/m ³ Ba As Barium soluble compounds [RR-00049-7]	5 mg/m ³ - TWA 15 mg/m ³ - TWA
Titanium dioxide	TWA: 0.2 mg/m ³ nanoscale respirable particulate matter TWA: 2.5 mg/m ³ finescale respirable particulate matter	15 mg/m ³ - TWA
Stoddard solvent	TWA: 100 ppm	500 ppm - TWA 2900 mg/m ³ - TWA
Ethyl benzene	Ototoxicant - potential to cause hearing disorders TWA: 20 ppm	100 ppm - TWA 435 mg/m ³ - TWA
1,2,4-Trimethylbenzene	TWA: 10 ppm	-

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 If splashes are likely to occur, wear: Tightly fitting safety goggles

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. 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)	10.4 - 10.9
Specific Gravity	1.24 - 1.31
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	70 - 80
Vol. % Solids	50 - 60
Wt. % Volatiles	20 - 30
Vol. % Volatiles	40 - 50
VOC Regulatory Limit (g/L)	< 400
Boiling Point (°F)	279
Boiling Point (°C)	137
Freezing point (°F)	No information available
Freezing Point (°C)	No information available
Flash point (°F)	105
Flash Point (°C)	41
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	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.

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. May cause sensitization by skin contact. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.
Ingestion Ingestion may cause irritation to mucous membranes. Small amounts of this product aspirated into the respiratory system during ingestion or vomiting may

Inhalation	cause mild to severe pulmonary injury, possibly progressing to death. 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	Suspected of causing genetic defects.
Reproductive Effects	May damage fertility or the unborn child.
Developmental Effects	No information available.
Target organ effects	No information available.
STOT - repeated exposure	Causes damage to organs through prolonged or repeated exposure if inhaled.
STOT - single exposure	May cause disorder and damage to the, Central nervous system, Respiratory 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) 8563 mg/kg

Component Information

Caution - This mixture contains a substance not yet fully tested

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Distillates, petroleum, hydrotreated light 64742-47-8	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 5.2 mg/L (Rat) 4 h
Solvent naphtha, petroleum, medium aliphatic 64742-88-7	> 25 mL/kg (Rat)	> 3000 mg/kg (Rabbit)	-
Zinc oxide 1314-13-2	> 5000 mg/kg (Rat)	-	-
Titanium dioxide 13463-67-7	> 10000 mg/kg (Rat)	-	-
Zinc phosphate 7779-90-0	> 5000 mg/kg (Rat)	-	-
Ethyl benzene 100-41-4	= 3500 mg/kg (Rat)	= 15400 mg/kg (Rabbit)	= 17.4 mg/L (Rat) 4 h
Cobalt bis(2-ethylhexanoate) 136-52-7	-	> 5000 mg/kg (Rabbit)	> 10 mg/L (Rat) 1 h
Methyl ethyl ketoxime 96-29-7	= 930 mg/kg (Rat)	1000 - 1800 mg/kg (Rabbit)	> 4.83 mg/L (Rat) 4 h
1,2,4-Trimethylbenzene 95-63-6	= 3280 mg/kg (Rat)	> 3160 mg/kg (Rabbit)	= 18 g/m ³ (Rat) 4 h
Carbamic acid, 1H-benzimidazol-2-yl-, methyl ester 10605-21-7	> 5050 mg/kg (Rat)	> 10000 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
Titanium dioxide	2B - Possible Human Carcinogen		Listed
Ethyl benzene	2B - Possible Human Carcinogen		Listed
Cobalt bis(2-ethylhexanoate)	2B - Possible Human Carcinogen	Reasonably Anticipated 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

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.)

Ethyl benzene

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

Methyl ethyl ketoxime

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

Carbamic acid, 1H-benzimidazol-2-yl-, methyl ester

LC50: 1.5 mg/L (Rainbow Trout - 96 hr.)

Acute Toxicity to Aquatic Invertebrates

Ethyl benzene

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

Methyl ethyl ketoxime

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

Carbamic acid, 1H-benzimidazol-2-yl-, methyl ester

LC50: 0.22 mg/L (water flea - 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, 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

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 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</u> <u>(de minimis concentration)</u>
Zinc oxide	1314-13-2	1 - 5	1.0
Zinc phosphate	7779-90-0	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</u> <u>(HAP)</u>
Ethyl benzene	100-41-4	0.1 - 0.5	Listed
Cobalt bis(2-ethylhexanoate)	136-52-7	0.1 - 0.5	Listed

US State Regulations

California Proposition 65

 **WARNING:** This product can expose you to chemicals including Titanium dioxide, 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

Chemical name	Massachusetts	New Jersey	Pennsylvania
Zinc oxide	X	X	X
Titanium dioxide	X	X	X
Zinc phosphate		X	X
Stoddard solvent	X	X	X
Cobalt bis(2-ethylhexanoate)		X	X
Carbamic acid, 1H-benzimidazol-2-yl-, methyl ester		X	

Legend

X - Listed

16. OTHER INFORMATION

HMIS

Health hazards	2*
Flammability	2
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 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

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