



SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
US OSHA Hazard Communication Standard (29 CFR 1910.1200)

Revision Date 06-Sep-2024

Version 6

1. IDENTIFICATION

Product identifier

Product Name SURFACE PREP 4.5OZ AE

Other means of identification

Product Code 24163

Recommended use of the chemical and restrictions on use

Recommended Use Surface active agent

Uses advised against No information available

Details of the supplier of the safety data sheet

Manufacturer Address

ITW Permatex, Inc.
6875 Parkland Blvd.
Solon, Ohio 44139 USA
Telephone: 1-87-Permatex
(866) 732-9502

24-hour emergency phone number

Chem-Tel: 800-255-3924
International Emergency:
00+1+ 813-248-0585
Contract Number: MIS0003453

E-mail address: mail@permatex.com

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 2
Germ cell mutagenicity	Category 1B
Reproductive toxicity	Category 1B
Specific target organ toxicity (single exposure)	Category 3
Aspiration toxicity	Category 1
Flammable aerosols	Category 1

Label elements

Emergency Overview

Signal word

Danger

Causes skin irritation
 May cause genetic defects
 May damage fertility or the unborn child
 May cause drowsiness or dizziness
 May be fatal if swallowed and enters airways
 Extremely flammable aerosol
 Pressurized container: May burst if heated



Appearance Green

Physical state Aerosol

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
 Wash face, hands and any exposed skin thoroughly after handling
 Avoid breathing 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
 Do not spray on an open flame or other ignition source
 Do not pierce or burn, even after use

Precautionary Statements - Response

If exposed or concerned: Get medical advice/attention

IF ON SKIN: Wash with plenty of soap and water
 If skin irritation occurs: Get medical advice/attention
 Take off contaminated clothing and wash before reuse
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
 Do NOT induce vomiting

Precautionary Statements - Storage

Store locked up
 Store in a well-ventilated place. Keep container tightly closed
 Protect from sunlight. Do not expose to temperatures exceeding 49 °C/120 °F
 Protect from sunlight

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

May be harmful in contact with skin. Very toxic to aquatic life with long lasting effects. Very toxic to aquatic life.

Unknown acute toxicity 32 % of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Not applicable

Mixture

Chemical name	CAS No.	Weight-%
HEPTANE	142-82-5	50 - <100%
PROPANE	74-98-6	10 - <25%
ISOBUTANE	75-28-5	10 - <25%
ETHANOL	64-17-5	1 - <2.5%
ORGANO-COPPER COMPOUND	22221-10-9	0.5 - <1%

4. FIRST AID MEASURES

Description of first aid measures

General advice	Call 911 or emergency medical service. Remove and isolate contaminated clothing and shoes.
Eye contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Skin contact	In case of contact with liquefied gas, thaw frosted parts with lukewarm water.
Inhalation	Move victim to fresh air. If breathing is irregular or stopped, administer artificial respiration. Administer oxygen if breathing is difficult.
Ingestion	IF SWALLOWED: Call a physician or poison control center immediately. Do NOT induce vomiting.
Self-protection of the first aider	Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

Most important symptoms and effects, both acute and delayed

Symptoms See section 2 for more information.

Indication of any immediate medical attention and special treatment needed

Note to physicians Keep victim warm and quiet.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing agent suitable for type of surrounding fire, Dry chemical or CO₂, Water spray, fog or regular foam, Move containers from fire area if you can do it without risk, Damaged cylinders should be handled only by specialists

Unsuitable extinguishing media

None

Hazardous combustion products No information available.

Explosion data

Sensitivity to Mechanical Impact None.
Sensitivity to Static Discharge None.

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.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Do not touch or walk through spilled material. Stop leak if you can do it without risk.

Other Information Ventilate the area.

Environmental precautions

Environmental precautions Use water spray to reduce vapors or divert vapor cloud drift. Avoid allowing water runoff to contact spilled material. Prevent entry into waterways, sewers, basements or confined areas. See section 12 for additional ecological information.

Methods and material for containment and cleaning up

Methods for containment If possible, turn leaking containers so that gas escapes rather than liquid. Allow substance to evaporate.

Methods for cleaning up Do not direct water at spill or source of leak.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Take precautionary measures against static discharges. Use spark-proof tools and explosion-proof equipment. Avoid breathing vapors or mists. Avoid contact with skin, eyes or clothing. Wash thoroughly after handling. Use personal protective equipment as required.

Conditions for safe storage, including any incompatibilities

Storage Conditions Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Store locked up.

Incompatible materials Strong acids, Bases, Acids

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters**Exposure Guidelines**

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
HEPTANE 142-82-5	TWA: 400 ppm STEL: 500 ppm	TWA: 500 ppm TWA: 2000 mg/m ³ (vacated) TWA: 400 ppm (vacated) TWA: 1600 mg/m ³ (vacated) STEL: 500 ppm (vacated) STEL: 2000 mg/m ³	IDLH: 750 ppm Ceiling: 440 ppm 15 min Ceiling: 1800 mg/m ³ 15 min TWA: 85 ppm TWA: 350 mg/m ³
PROPANE 74-98-6	: See Appendix F: Minimal Oxygen Content, explosion hazard Simple asphyxiant	TWA: 1000 ppm TWA: 1800 mg/m ³ (vacated) TWA: 1000 ppm	IDLH: 2100 ppm TWA: 1000 ppm TWA: 1800 mg/m ³

		(vacated) TWA: 1800 mg/m ³	
ISOBUTANE 75-28-5	STEL: 1000 ppm explosion hazard	-	TWA: 800 ppm TWA: 1900 mg/m ³
ETHANOL 64-17-5	STEL: 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m ³ (vacated) TWA: 1000 ppm (vacated) TWA: 1900 mg/m ³	IDLH: 3300 ppm TWA: 1000 ppm TWA: 1900 mg/m ³
ORGANO-COPPER COMPOUND 22221-10-9	TWA: 1 mg/m ³ Cu dust and mist	-	IDLH: 100 mg/m ³ Cu dust and mist TWA: 1 mg/m ³ Cu dust and mist

NIOSH IDLH *Immediately Dangerous to Life or Health*

Appropriate engineering controls

Engineering Controls Showers
 Eyewash stations
 Ventilation systems

Individual protection measures, such as personal protective equipment

- Eye/face protection** Wear safety glasses with side shields (or goggles).
- Skin and body protection** Wear protective natural rubber, nitrile rubber, Neoprene™ or PVC gloves.
- Respiratory protection** Use NIOSH-approved air-purifying respirator with organic vapor cartridge or canister, as appropriate.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice. Regular cleaning of equipment, work area and clothing is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state Aerosol
Appearance Green
Odor Solvent
Color Green
Odor threshold No information available

Property	Values	Remarks • Method
pH	No information available	
Melting point / freezing point	No data available	
Boiling point / boiling range	No data available	
Flash point	< 0 °C / < 32 °F	Gives a flame projection at full valve opening or flashback at any degree of valve opening
Evaporation rate	<1	Ether = 1
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	9.5%	
Lower flammability limit:	1.0%	
Vapor pressure	71 psig	
Vapor density	>1	Air = 1
Relative density	0.66	
Water solubility	Negligible	
Solubility(ies)	No Data Available	
Partition coefficient	No Data Available	
Autoignition temperature	No information available	
Hyphen	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	No information available	

Explosive properties No information available
Oxidizing properties No information available

Other information

Softening point No information available
Molecular weight No information available
Density No information available
Bulk density No information available
SADT (self-accelerating decomposition temperature) No information available

10. STABILITY AND REACTIVITY

Reactivity

No information available No Data Available

Chemical stability

Stable under normal conditions

Possibility of hazardous reactions

None under normal processing.

Hazardous polymerization

No information available.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Strong acids, Bases, Acids

Hazardous decomposition products

Carbon oxides
 Phosphorus
 Copper compounds

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation May cause irritation of respiratory tract.
Eye contact Contact with eyes may cause irritation. May cause redness and tearing of the eyes.
Skin contact May be harmful in contact with skin. May cause skin irritation and/or dermatitis.
Ingestion Ingestion may cause irritation to mucous membranes.

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
HEPTANE 142-82-5	-	= 3000 mg/kg (Rabbit)	> 29.29 mg/L (Rat) 4 h
PROPANE 74-98-6	-	-	> 800000 ppm (Rat) 15 min
ISOBUTANE 75-28-5	-	-	> 800000 ppm (Rat) 15 min
ETHANOL 64-17-5	= 7060 mg/kg (Rat)	-	= 116.9 mg/L (Rat) 4 h = 133.8 mg/L (Rat) 4 h
ORGANO-COPPER COMPOUND 22221-10-9	-	> 2000 mg/kg (Rat)	-

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

Sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
ETHANOL 64-17-5	A3	Group 1	Known	X

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - *Animal Carcinogen*

IARC (International Agency for Research on Cancer)

Group 1 - *Carcinogenic to Humans*

NTP (National Toxicology Program)

Known - *Known Carcinogen*

Occupational Safety and Health Administration of the US Department of Labor

X - *Present*

Chronic toxicity May cause adverse effects on the bone marrow and blood-forming system. May cause adverse liver effects. Contains a known or suspected reproductive toxin.

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 10590 mg/kg

ATEmix (dermal) 3046 mg/kg

ATEmix (inhalation-gas) 207143 ppm

ATEmix (inhalation-dust/mist) 30.4 mg/l

12. ECOLOGICAL INFORMATION

This product contains a chemical which is listed as a marine pollutant according to DOT.

Ecotoxicity

Very toxic to aquatic life with long lasting effects

4 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility

No information available.

Chemical name	Partition coefficient
HEPTANE 142-82-5	4.66
PROPANE 74-98-6	1.09
ISOBUTANE 75-28-5	2.8
ETHANOL 64-17-5	-0.35

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

- Disposal of wastes** Disposal should be in accordance with applicable regional, national and local laws and regulations.
- Contaminated packaging** Do not reuse container.
- US EPA Waste Number** Waste designations and classifications should be determined by the end user based on the application for which the product was used

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical name	California Hazardous Waste Status
HEPTANE 142-82-5	Toxic Ignitable
ETHANOL 64-17-5	Toxic Ignitable
ORGANO-COPPER COMPOUND 22221-10-9	Toxic

14. TRANSPORT INFORMATION

DOT

- UN number or ID number** 1950
- Proper shipping name** Aerosols, Limited Quantity (LQ)
- Transport hazard class(es)** 2.1
- Marine pollutant** This product contains a chemical which is listed as a marine pollutant according to DOT.
- Emergency Response Guide Number** 126

IATA

- UN number or ID number** ID 8000
- UN proper shipping name** Consumer Commodity
- Transport hazard class(es)** 9
- ERG Code** 9L

IMDG

- UN number or ID number** 1950
- UN proper shipping name** Aerosols, Limited Quantity (LQ)
- Transport hazard class(es)** 2.1
- EmS-No.** F-D, S-U
- Marine pollutant** This product contains a chemical which is listed as a marine pollutant according to IMDG/IMO.

15. REGULATORY INFORMATION

International Inventories

- TSCA** Complies
- DSL/NDSL** Complies
- EINECS/ELINCS** Complies
- ENCS** Complies
- IECSC** Complies
- KECI** Complies

PICCS Complies
 AICS Complies

Legend:

- TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
- DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List
- EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
- ENCS - Japan Existing and New Chemical Substances
- IECSC - China Inventory of Existing Chemical Substances
- KECL - Korean Existing Chemicals Inventory
- PICCS - Philippines Inventory of Chemicals and Chemical Substances
- AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	SARA 313 - Threshold Values %
ORGANO-COPPER COMPOUND - 22221-10-9	1.0

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	Yes
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
ORGANO-COPPER COMPOUND 22221-10-9	-	X	-	-

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:

Chemical name	California Proposition 65
ETHANOL 64-17-5	*Developmental (in alcoholic beverages)

- Ethanol is only considered a Proposition 65 developmental hazard when it is ingested as an alcoholic beverage

U.S. State Right-to-Know Regulations

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

WHMIS Hazard Class
B2 - Flammable liquid

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

<u>NFPA</u>	Health hazards 2	Flammability 3	Instability 0	-
<u>HMIS</u>	Health hazards 2	Flammability 3	Physical hazards 0	Personal protection B

Revision Date 06-Sep-2024

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End of Safety Data Sheet