



# SAFETY DATA SHEET

Revision Date 24-Feb-2020

Version 4

## 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  
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

**May Also Be Distributed by:**

ITW Permatex Canada  
101-2360 Bristol Circle  
Oakville, ON Canada L6H 6M5  
Telephone: (800) 924-6994

**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
Carcinogenicity	Category 1A
Specific target organ toxicity (single exposure)	Category 3
Aspiration toxicity	Category 1
Gases under pressure	Compressed gas

**Label elements**

**Emergency Overview**

**Signal word**

**Danger**

Causes skin irritation  
May cause genetic defects  
May cause cancer  
May cause respiratory irritation

May cause drowsiness or dizziness  
 May be fatal if swallowed and enters airways  
 Contains gas under pressure; may explode if heated



**Appearance** Apple

**Physical state** 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  
 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

#### Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention  
 Specific treatment (see .? on this label)

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

#### 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                      0% of the mixture consists of ingredient(s) of unknown toxicity

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
HEPTANE	142-82-5	40 - 70
PROPANE	74-98-6	10 - 30
ISOBUTANE	75-28-5	10 - 30
ETHANOL	64-17-5	1 - 5

## 4. FIRST AID MEASURES

### Description of first aid measures

<b>General advice</b>	Call 911 or emergency medical service. Remove and isolate contaminated clothing and shoes.
<b>Eye contact</b>	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.
<b>Skin contact</b>	In case of contact with liquefied gas, thaw frosted parts with lukewarm water.
<b>Inhalation</b>	Move victim to fresh air. If breathing is irregular or stopped, administer artificial respiration. Administer oxygen if breathing is difficult.
<b>Ingestion</b>	IF SWALLOWED: Call a physician or poison control center immediately. Do NOT induce vomiting.
<b>Self-protection of the first aider</b>	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 CO<sub>2</sub>, 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

### Specific hazards arising from the chemical

Some may burn but none ignite readily. Ruptured cylinders may rocket.

### 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.

### Methods and material for containment and cleaning up

<b>Methods for containment</b>	If possible, turn leaking containers so that gas escapes rather than liquid. Allow substance to evaporate.
<b>Methods for cleaning up</b>	Do not direct water at spill or source of leak.
<b>Prevention of secondary hazards</b>	Clean contaminated objects and areas thoroughly observing environmental regulations.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

<b>Advice on safe handling</b>	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.
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### Conditions for safe storage, including any incompatibilities

<b>Storage Conditions</b>	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Store locked up.
<b>Incompatible materials</b>	Strong acids, Bases, Acids

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
HEPTANE 142-82-5	STEL: 500 ppm TWA: 400 ppm	TWA: 500 ppm TWA: 2000 mg/m <sup>3</sup> (vacated) TWA: 400 ppm (vacated) TWA: 1600 mg/m <sup>3</sup> (vacated) STEL: 500 ppm (vacated) STEL: 2000 mg/m <sup>3</sup>	IDLH: 750 ppm Ceiling: 440 ppm 15 min Ceiling: 1800 mg/m <sup>3</sup> 15 min TWA: 85 ppm TWA: 350 mg/m <sup>3</sup>
PROPANE 74-98-6	: See Appendix F: Minimal Oxygen Content, explosion hazard	TWA: 1000 ppm TWA: 1800 mg/m <sup>3</sup> (vacated) TWA: 1000 ppm (vacated) TWA: 1800 mg/m <sup>3</sup>	IDLH: 2100 ppm TWA: 1000 ppm TWA: 1800 mg/m <sup>3</sup>
ISOBUTANE 75-28-5	STEL: 1000 ppm explosion hazard	-	TWA: 800 ppm TWA: 1900 mg/m <sup>3</sup>
ETHANOL 64-17-5	STEL: 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup> (vacated) TWA: 1000 ppm (vacated) TWA: 1900 mg/m <sup>3</sup>	IDLH: 3300 ppm TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup>

NIOSH IDLH *Immediately Dangerous to Life or Health*

<b>Other Information</b>	Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).
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### Appropriate engineering controls

<b>Engineering Controls</b>	Showers Eyewash stations Ventilation systems
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### Individual protection measures, such as personal protective equipment

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

<b>Physical state</b>	Liquid
<b>Appearance</b>	Apple
<b>Odor</b>	Solvent
<b>Odor threshold</b>	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No information available	
<b>Melting point / freezing point</b>	No information available	
<b>Boiling point / boiling range</b>	No information available	
<b>Flash point</b>	< 0 °C / < 32 °F	Gives a flame projection at full valve opening or flashback at any degree of valve opening
<b>Evaporation rate</b>	<1	Ether = 1
<b>Flammability (solid, gas)</b>	No information available	
<b>Flammability Limit in Air</b>		
<b>Upper flammability limit:</b>	9.5%	
<b>Lower flammability limit:</b>	1.0%	
<b>Vapor pressure</b>	71 psig	
<b>Vapor density</b>	>1	Air = 1
<b>Relative density</b>	0.66	
<b>Water solubility</b>	Negligible	
<b>Solubility(ies)</b>	No information available	
<b>Partition coefficient</b>	No information available	
<b>Autoignition temperature</b>	No information available	
<b>Decomposition temperature</b>	No information available	
<b>Kinematic viscosity</b>	No information available	
<b>Dynamic viscosity</b>	No information available	
<b>Explosive properties</b>	No information available	
<b>Oxidizing properties</b>	No information available	
<b><u>Other Information</u></b>		
<b>Softening point</b>	No information available	
<b>Molecular weight</b>	No information available	
<b>VOC Content (%)</b>	95	
<b>Density</b>	No information available	
<b>Bulk density</b>	No information available	
<b>SADT (self-accelerating decomposition temperature)</b>	No information available	

## 10. STABILITY AND REACTIVITY

### Reactivity

No information available

### Chemical stability

Stable under normal conditions

### Possibility of Hazardous Reactions

None under normal processing.

**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**

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

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
HEPTANE 142-82-5	-	= 3000 mg/kg ( Rabbit )	= 103 g/m <sup>3</sup> ( Rat ) 4 h
PROPANE 74-98-6	-	-	> 800000 ppm ( Rat ) 15 min
ISOBUTANE 75-28-5	-	-	= 658 mg/L ( Rat ) 4 h
ETHANOL 64-17-5	= 7060 mg/kg ( Rat )	-	= 124.7 mg/L ( Rat ) 4 h

**Information on toxicological effects**

**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*

OSHA (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.

**Target Organ Effects** Central nervous system, Respiratory system, Eyes, Skin, Blood, Liver, Reproductive System.

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

<b>ATEmix (oral)</b>	353000 mg/kg
<b>ATEmix (dermal)</b>	4615 mg/kg
<b>ATEmix (inhalation-gas)</b>	1124303 mg/l
<b>ATEmix (inhalation-dust/mist)</b>	155 mg/l

## 12. ECOLOGICAL INFORMATION

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

### Ecotoxicity

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	2.3
ISOBUTANE 75-28-5	2.88
ETHANOL 64-17-5	-0.32

### Other adverse effects

No information available

## 13. DISPOSAL CONSIDERATIONS

### Waste treatment methods

<b>Disposal of wastes</b>	This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261).
<b>Contaminated packaging</b>	Do not reuse container.
<b>US EPA Waste Number</b>	D001

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

## 14. TRANSPORT INFORMATION

### DOT

<b>UN/ID No</b>	1950
<b>Proper shipping name:</b>	Aerosols, Limited Quantity (LQ)
<b>Hazard Class</b>	2.1
<b>Marine pollutant</b>	This product contains a chemical which is listed as a marine pollutant according to DOT.
<b>Emergency Response Guide Number</b>	126

**IATA**

<b>UN/ID No</b>	ID 8000
<b>Proper shipping name:</b>	Consumer commodity
<b>Hazard Class</b>	9
<b>ERG Code</b>	9L

**IMDG**

<b>UN/ID No</b>	1950
<b>Proper shipping name:</b>	Aerosols, Limited Quantity (LQ)
<b>Hazard Class</b>	2.1
<b>EmS-No</b>	F-D, S-U
<b>Marine pollutant</b>	This product contains a chemical which is listed as a marine pollutant according to IMDG/IMO.

**15. REGULATORY INFORMATION****International Inventories**

<b>TSCA</b>	Complies
<b>DSL/NDSL</b>	Complies
<b>EINECS/ELINCS</b>	Complies
<b>ENCS</b>	Complies
<b>IECSC</b>	Complies
<b>KECL</b>	Complies
<b>PICCS</b>	Complies
<b>AICS</b>	Complies

**Legend:**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - 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 and Evaluated Chemical Substances  
**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

**SARA 311/312 Hazard Categories**

<b>Acute health hazard</b>	Yes
<b>Chronic Health Hazard</b>	No
<b>Fire hazard</b>	Yes
<b>Sudden release of pressure hazard</b>	No
<b>Reactive Hazard</b>	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)

**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	Carcinogen Developmental

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

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
HEPTANE 142-82-5	X	X	X
PROPANE 74-98-6	X	X	X
ISOBUTANE 75-28-5	X	X	X
ETHANOL 64-17-5	X	X	X
ORGANO-COPPER COMPOUND 68084-48-0	X	-	X
ORGANO-COPPER COMPOUND 22221-10-9	X	-	X

**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**

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

NFPA (National Fire Protection Association)

HMIS (Hazardous Material Information System)

Revision Date 24-Feb-2020

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End of Safety Data Sheet