



SAFETY DATA SHEET

Revision Date 24-Mar-2016

Version 2

1. IDENTIFICATION

Product identifier

Product Name SURFACE PREP 4.5OZ AE

Other means of identification

Product Code 24163

Synonyms None

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, OH 44139 USA

Distributor

ITW Permatex Canada
35 Brownridge Road, Unit 1
Halton Hills, ON Canada L7G 0C6
Telephone: (800) 924-6994

Company Phone Number

1-87-Permatex
(877) 376-2839

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 |
| Specific target organ toxicity (single exposure) | Category 3 |
| Aspiration toxicity | Category 1 |
| Flammable aerosols | Category 1 |
| Gases under pressure | Liquefied gas |

Label elements

Emergency Overview

Danger

Causes skin irritation
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** Liquid**Odor** Solvent**Precautionary Statements - Prevention**

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/sparks/open flames/hot surfaces. - No smoking
 Do not spray on an open flame or other ignition source
 Pressurized container: Do not pierce or burn, even after use
 Wear protective gloves

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention
 Specific treatment (see supplemental first aid instructions 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

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

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

- The classification as a carcinogen or mutagen need not apply if it can be shown that the substance contains less than 0.1 % w/w 1,3-butadiene (EINECS No. 203-450-8). If the substance is not classified as a carcinogen or mutagen, at least the S-phrases (2-)-9-16 (Table 3.2) should apply. This note applies only to certain complex oil-derived substances in Part 3

Unknown acute toxicity 5 % of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

substance(s)

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

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

| | |
|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| General advice | Get medical advice/attention if you feel unwell. |
| 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 | IF ON SKIN: Wash skin with soap and water. If skin irritation persists, call a physician. Wash contaminated clothing before reuse. |
| Inhalation | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If symptoms persist, call a physician. |
| Ingestion | IF SWALLOWED: Call a physician or poison control center immediately. |
| Self-protection of the first aider | Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. |

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 Treat symptomatically.

5. FIRE-FIGHTING MEASURES**Suitable extinguishing media**

Carbon dioxide (CO₂), Dry chemical, Foam

Unsuitable extinguishing media

None.

Specific hazards arising from the chemical

Extremely flammable. Will be easily ignited by heat, sparks or flames. Vapors may travel to source of ignition and flash back.

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 Ensure adequate ventilation, especially in confined areas. Avoid contact with eyes and skin. Use personal protective equipment as required.

Environmental precautions

Environmental precautions See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Eliminate all ignition sources if safe to do so. Ensure adequate ventilation. Soak up with

inert absorbent material. Sweep up and shovel into suitable containers for disposal.

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.

Incompatible materials 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 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 | TWA: 1000 ppm | TWA: 1000 ppm TWA: 1800 mg/m ³ (vacated) TWA: 1000 ppm (vacated) TWA: 1800 mg/m ³ | IDLH: 2100 ppm TWA: 1000 ppm TWA: 1800 mg/m ³ |
| ISOBUTANE 75-28-5 | STEL: 1000 ppm | - | 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 |

NIOSH IDLH *Immediately Dangerous to Life or Health*

Other Information Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

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

Information on basic physical and chemical properties

| | |
|-----------------------|--------------------------|
| Physical state | Liquid |
| Appearance | Green |
| Odor | Solvent |
| Odor threshold | No information available |

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|---------------------------------------|--------------------------|--------------------------------------------------------------------------------------------|
| pH | No information available | |
| Melting point / freezing point | No information available | |
| Boiling point / boiling range | Not determined | |
| 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 in other solvents | No information available | |
| Partition coefficient | No information available | |
| Autoignition temperature | No information available | |
| Decomposition temperature | 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 |
| VOC Content (%) | 97.6% |
| Density | No information available |
| Bulk density | No information available |

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Heat, flames and sparks. Take precautionary measures against static discharges.

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. May cause drowsiness or dizziness. |
| Eye contact | Contact with eyes may cause irritation. May cause redness and tearing of the eyes. |
| Skin contact | May cause skin irritation and/or dermatitis. |
| Ingestion | Potential for aspiration if swallowed. Aspiration may cause pulmonary edema and pneumonitis. |

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|----------------------|----------------------|-------------------------|------------------------------------|
| HEPTANE 142-82-5 | - | = 3000 mg/kg (Rabbit) | = 103 g/m ³ (Rat) 4 h |
| PROPANE 74-98-6 | - | - | = 658 mg/L (Rat) 4 h |
| 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 .

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

12. ECOLOGICAL INFORMATION

Ecotoxicity

33 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

| Chemical Name | Algae/aquatic plants | Fish | Crustacea |
|---------------------|----------------------|------------------------------------|----------------------------------|
| HEPTANE 142-82-5 | - | 375.0: 96 h Cichlid fish mg/L LC50 | 10: 24 h Daphnia magna mg/L EC50 |

| | | | |
|--------------------|---|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| ETHANOL 64-17-5 | - | 12.0 - 16.0: 96 h Oncorhynchus mykiss mL/L LC50 static 100: 96 h Pimephales promelas mg/L LC50 static 13400 - 15100: 96 h Pimephales promelas mg/L LC50 flow-through | 9268 - 14221: 48 h Daphnia magna mg/L LC50 2: 48 h Daphnia magna mg/L EC50 Static 10800: 24 h Daphnia magna mg/L EC50 |
|--------------------|---|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|

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

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

| | |
|----------------------------------------|---------------------------------|
| UN/ID no | 1950 |
| Proper shipping name: | Aerosols, Limited Quantity (LQ) |
| Hazard Class | 2.1 |
| Emergency Response Guide Number | 126 |

IATA

| | |
|------------------------------|--------------------|
| UN/ID no | ID 8000 |
| Proper shipping name: | Consumer commodity |

Hazard Class 9
ERG Code 9L

IMDG

UN/ID no 1950
Proper shipping name: Aerosols, Limited Quantity (LQ)
Hazard Class 2.1
EmS-No F-D, S-U

15. REGULATORY INFORMATION

International Inventories

TSCA Complies
DSL/NDSL Complies
EINECS/ELINCS Complies
ENCS Complies
IECSC Complies
KECL Complies
PICCS Complies
AICS Not determined

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

Acute health hazard Yes
Chronic Health Hazard Yes
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)

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 |

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

A Compressed gases, B5 - Flammable aerosol, D2B - Toxic materials

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

| | | | | |
|-------------|-------------------------|-----------------------|---------------------------|------------------------------|
| NFPA | Health hazards 2 | Flammability 3 | Instability 0 | - |
| HMIS | Health hazards 2 | Flammability 3 | Physical hazards 0 | Personal protection B |

NFPA (National Fire Protection Association)

HMIS (Hazardous Material Information System)

Revision Date

24-Mar-2016

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet