SAFETY DATA SHEET

Section 1. Identification

Product identifier : SAWYER PICARIDIN LOTION

Material Number : SP561, SP562, SP563, SP564, SP565, SP566, SP567, SP568, SP569

Chemical name : 1-Piperidinecarboxylic acid, 2-(2-hydroxyethyl)-, 1-methylpropyl ester

EPA Registration Number: : 54287-23-58188

Identified uses : Insect Repellent

Supplier/Manufacturer : SAWYER PRODUCTS
PO BOX 188
SAFETY HARBOR, FL 34695
USA

For information: US/Canada 800.356.7811
International +1 727.725.1177

In case of emergency : Chemtrec 800.424.9300
International 727.725.1177
SAWYER Emergency Phone 800.356.7811

Section 2. Hazards identification

HAZCOM Standard Status : While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), the SDS contains valuable information critical to the safe handling and proper use of the product. The SDS should be retained and available for employees and other users of this product.

Physical state : Lotion

Classification of the substance or mixture : Not classified.

Signal word : No signal word.

Hazard statements : No known significant effects or critical hazards.

Hazard Not Otherwise Classified (HNOC) : None known.

Precautionary statements

Prevention : Not applicable.

Response : Not applicable.

Storage : Not applicable.

Disposal : Not applicable.

Supplemental label elements : Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials and food and drink.

Section 3. Composition/information on ingredients

Substance/mixture : Substance

Chemical name : 1-Piperidinecarboxylic acid, 2-(2-hydroxyethyl)-, 1-methylpropyl ester

CAS number : 119515-38-7

Ingredient name	%	CAS number
1-Piperidinecarboxylic Acid, 2-(2-hydroxyethyl)-, 1-methylpropylester	20	119515-38-7

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

Section 3. Composition/information on ingredients

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of first aid measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Skin contact : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Ingestion : Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : No specific data.

Potential chronic health effects

No known significant effects or critical hazards.

Notes to physician : Treat symptomatically. No specific treatment.

Protection of first-aiders : No special measures required.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire. In case of fire, use water spray (fog), foam or dry chemical.

Unsuitable extinguishing media : None known.

Specific hazards arising from the chemical : In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides

Section 5. Fire-fighting measures

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up : Stop leak if without risk. Move containers from spill area. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal. Prevent entry into sewers, water courses, basements or confined areas.

Section 7. Handling and storage

Precautions for safe handling

Protective measures : Remove contaminated clothing and protective equipment before entering eating areas. Workers should wash hands and face before eating, drinking and smoking. Put on appropriate personal protection equipment. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.

Conditions for safe storage : Store between the following temperatures: 0 to 30°C (32 to 86°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Empty containers or liners may retain some product residues.

Section 8. Exposure controls/personal protection

Occupational exposure limits

No exposure limit value known.

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Personal protection

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Respiratory protection : A NIOSH approved air purifying respirator with organic vapor cartridges and particulate prefilter can be used to minimize exposure.

Skin protection : Rubber gloves. Wear cloth work clothing including long pants and long-sleeved shirts.

Eye/face protection : goggles.

Medical Surveillance : Not available.

Section 9. Physical and chemical properties

Physical state : Lotion

Color : Not available.

Odor : Not available.

Odor threshold : Not available.

pH : 7

Boiling point : 272 °C (1013 hPa)

Melting point : Not available.

Flash point : Closed cup: 142°C (287,6°F) [DIN 51758]

Evaporation rate : Not available.

Explosion limits : Not available.

Vapor pressure : 0 hPa (20℃)
0 hPa (25℃)
0 hPa (50℃)

Density : 1.0362 g/cm³

Specific gravity (Relative density) : Not available.

Solubility : 8,6 g/l (water)

Partition coefficient: n-octanol/water : (OECD 107measured)

Vapor density : Not available.

Viscosity : Dynamic: 129 mPa·s

Efflux time : 31s

Ignition temperature : 375°C

Auto-ignition temperature : Not available.

Decomposition temperature : >270°C

Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : No specific data.

Incompatible materials : Oxidizing agents, Reducing agents

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on the likely routes of exposure : Dermal contact. Eye contact. Inhalation. Ingestion.

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : No specific data.

Section 11. Toxicological information

Potential chronic health effects

Short term exposure

Potential immediate effects : Not available.

Long term exposure

Potential delayed effects : Not available.

General : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure	Test
1-Piperidinecarboxylic Acid, 2-(2-hydroxyethyl)-, 1-methylpropylester	LD50 Oral	Rat	2236 mg/kg	-	-
1-Piperidinecarboxylic Acid, 2-(2-hydroxyethyl)-, 1-methylpropylester	LD50 Dermal	Rat	>5000 mg/kg	-	-
1-Piperidinecarboxylic Acid, 2-(2-hydroxyethyl)-, 1-methylpropylester	LC50 Inhalation Dusts and mists	Rat	>4.364 mg/l	4 hours	Highest producible concentration.

Sensitization

Product/ingredient name	Route of exposure	Species	Result
1-Piperidinecarboxylic Acid, 2-(2-hydroxyethyl)-, 1-methylpropylester	skin	Guinea pig	Not sensitizing

Carcinogenicity

Product/ingredient name	CAS #	IARC	NTP	OSHA
1-Piperidinecarboxylic Acid, 2-(2-hydroxyethyl)-, 1-methylpropylester	119515-38-7	Not classified.	Not classified.	Not classified.

Section 12. Ecological information

Toxicity

Product/ingredient name	Test	Result	Species	Exposure
1-Piperidinecarboxylic Acid, 2-(2-hydroxyethyl)-, 1-methylpropylester	-	Acute EC50 1087 mg/l	Bacteria - Activated sludge	3 hours
	-	Acute EC50 >103 mg/l	Daphnia - Daphnia magna	48 hours
	OECD 201 Alga, Growth Inhibition Test (biomass)	Acute IC50 87.3 mg/l	Algae - Desmodesmus subspicatus	72 hours
	-	Acute LC50 169.4 mg/l	Fish - Oncorhynchus mykiss	96 hours

Section 12. Ecological information

	OECD 201 Alga, Growth Inhibition Test (biomass) - -	Chronic NOEC 54.8 mg/l Chronic NOEC 49.25 mg/l Chronic NOEC 3.14 mg/l	Algae - Scenedesmus subspicatus Daphnia - Daphnia magna Fish - Danio rerio	72 hours 21 days 32 days

Conclusion/Summary : Not available.

Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
1-Piperidinecarboxylic Acid, 2-(2-hydroxyethyl)-, 1-methylpropylester	BOD	<1 % - Not readily - 28 days	-	-

Conclusion/Summary : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
1-Piperidinecarboxylic Acid, 2-(2-hydroxyethyl)-, 1-methylpropylester	-	-	Not readily

Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
1-Piperidinecarboxylic Acid, 2-(2-hydroxyethyl)-, 1-methylpropylester	2.11	-	low

Mobility in soil

Soil/water partition coefficient (K_{OC}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Waste disposal should be in accordance with existing federal state, provincial and or local environmental controls laws.

RCRA classification : If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste. (40 CFR 261.20-24)

Section 14. Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
DOT Classification	-	-	-	-		Not regulated.
IMDG Class	-	-	-	-		Not regulated.
IATA-DGR Class	-	-	-	-		Not regulated.

PG* : Packing group

RQ : 0 lbs

Section 15. Regulatory information

SARA 311/312 : None

SARA Title III Section 302 Extremely Hazardous Substances : None

SARA Title III Section 313 Toxic Chemicals : None

US EPA CERCLA Hazardous Subtances (40 CFR 302) : None

State regulations

The following chemicals are specifically listed by individual states; other product specific health and safety data in other sections on the SDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropraite agency in your state.

Ingredient name	CAS number	State Code	Concentration (%)
1-Piperidinecarboxylic Acid, 2-(2-hydroxyethyl)-, 1-methylpropylester	119515-38-7		>97

Massachusetts Substances: MA - S
Massachusetts Extraordinary Hazardous Substances: MA - Extra HS
New Jersey Hazardous Substances: NJ - HS
Pennsylvania RTK Hazardous Substances: PA - RTK HS
Pennsylvania Special Hazardous Substances: PA - Special HS

U.S. Toxic Substances Control Act : This product is excluded from TSCA Regulation under FIFRA Section 3 (2)(B)(ii) when used as a pesticide.

FIFRA

EPA Registration Number 54287-23-58188

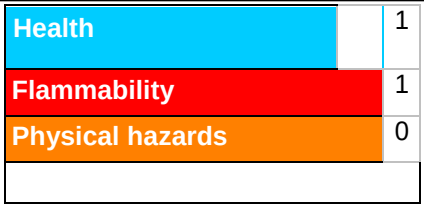
This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

Signal word : CAUTION!

Hazard statements : Harmful if swallowed. Causes moderate eye irritation.

Section 16. Other information

Hazardous Material Information System :



0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme
***=Chronic**

The customer is responsible for determining the PPE code for this material. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

Section 16. Other information

National Fire Protection Association (U.S.A.) :

0= Minimal 1=Slight 2=Moderate 3=Serious 4=Severe

Sawyer's method of hazard communication is comprised of Product Labels and Safety Data Sheets. HMIS and NFPA ratings are provided by Sawyer as a customer service.

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Product Safety and Regulatory Affairs

Indicates information that has changed from previously issued version.

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