



Issuing Date 20-Jun-2014

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Version 2

Safety Data Sheet

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product name Sierra Marine Fogging Oil

Other means of identification

Product Code(s) 18-9550-0

Synonyms No information available

Recommended use of the chemical and restrictions on use

Recommended Use Aerosol.

Uses advised against No information available

Details of the supplier of the safety data sheet

Distributor

Sierra International

1 Sierra Place

Litchfield, IL 62056

Tel: 1-217-324-9487

Emergency telephone number

Company Phone Number 618-542-5431

Company Emergency Phone 618-542-5431

Number

Emergency telephone number Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

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

FLAMMABLE AEROSOLS

Category 1

Label elements

EMERGENCY OVERVIEW

DANGER

Hazard statements

H222 - Extremely flammable aerosol



Appearance No information available

Physical state Aerosol

Odor No information available

Precautionary Statements - Prevention

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

Precautionary Statements - Storage

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

Hazards not otherwise classified (HNOC)**Other information**

- May be harmful in contact with skin

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS-No	Weight %	Trade secret
Petroleum distillates, hydrotreated heavy naphthenic	64742-52-5	68	*
Butane	106-97-8	22	*
Propane	74-98-6	8	*
Petroluem Oil	VARIOUS	2	*

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

4. FIRST AID MEASURES**First aid measures**

Eye contact	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.
Skin contact	Remove contaminated shoes and clothing and cleanse affected area(s) thoroughly by washing with mild soap and water or a waterless hand cleaner. If irritation or redness develops and persists, seek medical attention. Get medical attention if irritation develops and persists.
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if symptoms appear.
Ingestion	Clean mouth with water and afterwards drink plenty of water.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

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

Foam. Water spray or fog. Carbon dioxide (CO₂). Dry chemical.

Small Fires Always use personal safety equipment. Follow appropriate personal safety procedures, and extinguishing media.

Large Fires Contact emergency personnel.

Unsuitable extinguishing media Caution: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

Containers may explode when heated. Overexposure to decomposition products may cause a health hazard.

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 protection**

Ensure adequate ventilation. Avoid contact with eyes.

For emergency responders

Ventilate the area. Remove all sources of ignition. Avoid breathing vapors or mists. Clean up area with absorbent material and place in closed containers for disposal.

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

Pick up and transfer to properly labeled containers.

7. HANDLING AND STORAGE**Precautions for safe handling****Advice on safe handling**

Ensure adequate ventilation. Avoid contact with eyes. Keep away from open flames, hot surfaces and sources of ignition. Do not stick pin or any other sharp object into opening on top of can.

Conditions for safe storage, including any incompatibilities**Storage Conditions**

Do not store above 49°C.
Do not puncture or incinerate cans.
Do not stick pin, nail or any other sharp object into opening on top of can.

Incompatible Products

Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Control parameters****Exposure guidelines**

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Butane 106-97-8	1000 ppm STEL	-	TWA: 800 ppm TWA: 1900 mg/m ³
Propane 74-98-6	TWA: 1000 ppm	TWA: 1000 ppm TWA: 1800 mg/m ³	IDLH: 2100 ppm TWA: 1000 ppm TWA: 1800 mg/m ³

Appropriate engineering controls

Engineering Controls

Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face Protection Avoid contact with eyes. Wear safety glasses if contact is likely.

Skin and body protection Solvent resistant gloves required for prolonged or repeated contact.

Respiratory protection Avoid breathing vapors. Use with adequate ventilation equal to out of doors. In restricted areas, use approved chemical/ mechanical filters designed to remove a combination of particles and vapor. In confined areas, use approved air line type respirator or hood. Self-contained breathing apparatus is required for vapor concentrations above PEL/TLV limits.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Aerosol	Odor	No information available
Appearance	No information available	Odor threshold	No information available
Color	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/Range	No information available -44 - 500 °F	
Flash point	-104.4 °C / -156 °F	
Evaporation rate	Slower than ether	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	9.5	
Lower flammability limit:	1.9	
Vapor pressure	No information available	
Vapor density	Heavier than air	
Specific gravity	0.76	
Water solubility	negligible	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature		
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
VOC Content	Approximately 30% by weight
Density	No information available
Bulk density	No information available

10. STABILITY AND REACTIVITY

Reactivity
No data available

Chemical stability

Stable.

Possibility of Hazardous Reactions

May produce fumes when heated to decomposition. Fumes may contain carbon monoxide and other toxic fumes.

Hazardous polymerization Hazardous polymerization does not occur.

Conditions to avoid

Keep away from open flames, hot surfaces and sources of ignition.

Incompatible materials

Strong oxidizing agents.

Hazardous decomposition products

May produce fumes when heated to decomposition. Fumes may contain carbon monoxide and other toxic fumes.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	No data available
Inhalation	Respiratory irritation, headache, nausea, fatigue, drowsiness, impaired coordination.
Eye contact	Avoid contact with eyes. Contact with eyes may cause irritation.
Skin contact	Repeated exposure may cause skin dryness or cracking. Prolonged contact may cause redness and irritation.
Ingestion	Do NOT taste or swallow.

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Butane 106-97-8	-	-	= 658 g/m ³ (Rat) 4 h
Propane 74-98-6	-	-	= 658 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

Irritation May cause skin and eye irritation.
Sensitization No information available.
Germ cell mutagenicity No information available.
Carcinogenicity No information available.

Chemical name	ACGIH	IARC	NTP	OSHA
Petroleum distillates, hydrotreated heavy naphthenic 64742-52-5	-	Group 1	-	X

Reproductive toxicity No information available.
STOT - single exposure No information available.
STOT - repeated exposure No information available.
Aspiration hazard No information available.

Numerical measures of toxicity - Product Information

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

12. ECOLOGICAL INFORMATION

Ecotoxicity

32% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical name	Algae/aquatic plants	Fish	Crustacea
Petroleum distillates, hydrotreated heavy naphthenic 64742-52-5	-	5000: 96 h Oncorhynchus mykiss mg/L LC50	1000: 48 h Daphnia magna mg/L EC50

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Chemical name	Partition coefficient
Butane 106-97-8	<=2.8
Propane 74-98-6	<=2.8

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods**Waste Disposal Method**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging

Do not reuse container.

14. TRANSPORT INFORMATION

DOT

Regulated

UN-No	UN1950
Proper shipping name	Aerosols, flammable (Mixture)
UN-No	1950
Proper shipping name	Consumer commodity, ORM-D
Proper shipping name	Consumer commodity, ORM-D

15. REGULATORY INFORMATION

International Inventories

TSCA	Does not comply
DSL/NDSL	Does not comply
EINECS/ELINCS	Does not comply
ENCS	Does not comply
IECSC	Does not comply
KECL	Does not comply
PICCS	Does not comply
AICS	Does not comply

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 Commercial Chemical Substances/EU 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

U.S. 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	No
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as 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

U.S. State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Butane 106-97-8	X	-	X
Propane 74-98-6	X	-	X

U.S. EPA Label Information

EPA Pesticide registration number Not Applicable

16. OTHER INFORMATION

<u>NFPA</u>	Health hazards 1	Flammability 4	Instability 0	Physical and Chemical Hazards -
<u>HMIS</u>	Health hazards 1	Flammability 4	Physical hazards 0	Personal protection X

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Revision Note

SDS sections updated 9

Disclaimer

The information provided on this SDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of MSDS