

MATERIAL SAFETY DATA SHEET**SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION**

Product identifier : **Sea Foam Spray**
Product Use : For internal engine use only
Chemical Family : Mixture.
Manufacturer part no. : SS14
Supplier's name and address: **Manufacturer's name and address:**
Sea Foam Sales Company Refer to Supplier
 12987 Pioneer Trail
 Eden Prairie, MN, USA 55347




24 Hr. Emergency Tel # : 1-800-535-5053 (Infotrac)

NOTE: INFOTRAC emergency number is to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

<u>Ingredients</u>	<u>CAS #</u>	<u>Wt.%</u>	<u>LC₅₀(4hr)</u> <u>(Rat, ihl.)</u>	<u>LD₅₀</u>	
				<u>(Oral, rat)</u>	<u>(Rabbit, dermal)</u>
Pale Oil	64742-54-7	40.00 - 60.00	N/Av	>15000 mg/kg	>5000 mg/kg
Naphtha	64742-49-0	25.00 - 35.00	N/Av	>5000 mg/kg	N/Av
IPA	67-63-0	10.00 - 20.00	17000ppm	4720mg/kg	12890mg/kg
Carbon dioxide	124-38-9	3.00 - 5.00	N/Av	N/Av	N/Av

SECTION 3 - HAZARDS IDENTIFICATION**EMERGENCY OVERVIEW**

Clear liquid, contained in a pressurized aerosol can. Typical odor.
 Warning! Extremely flammable aerosol. Vapors may cause flash fire. Harmful or fatal if swallowed. Can enter the lungs and cause damage. Harmful if inhaled. May cause nausea, vomiting, headache and other central nervous system effects. Causes eye irritation. May cause skin irritation. May have fetotoxic effects, based on animal studies.

*****POTENTIAL HEALTH EFFECTS*****

Target organs : Eyes, skin, respiratory system and digestive system.
Routes of exposure : *Inhalation:* YES *Skin Absorption:* YES *Skin & Eyes:* YES *Ingestion:* YES
Signs and symptoms of short-term (acute) exposure

Inhalation : Inhalation of vapors can cause nasal and respiratory irritation. Exposure to high vapor concentration can cause dizziness, nausea and central nervous system depression. May be fatal if inhaled. Breathing saturated vapors for a few minutes may be fatal. Saturated vapors can be encountered in confined spaces and/or under conditions of poor ventilation. Propellant is a simple asphyxiant.

Skin : May cause mild skin irritation. May be absorbed and cause symptoms similar to those for inhalation. If product is sprayed directly on skin, symptoms of frostbite may be experienced including numbness,

Eyes : May cause moderate eye irritation. Spraying the product directly into the eyes may cause freezing, and could cause eye damage.

Ingestion : Not an expected route of entry under normal conditions of use. However, if the product is sprayed directly into mouth and large amounts of the liquid concentrate are swallowed, it may cause irritation to the mouth, throat and stomach. May cause central nervous system depression. May be absorbed and cause symptoms similar to those for inhalation. Symptoms may include burning pain, vomiting and diarrhea. Aspiration into the lungs during swallowing or subsequent vomiting may cause chemical pneumonitis, which can be fatal.

Potential chronic health effects : Prolonged skin contact may cause dermatitis (rash), characterized by red, dry, itching skin. Prolonged overexposure to product can result in permanent central nervous system changes. May cause lung inflammation and lung damage with extreme exposures.

Other important hazards : Contains material which may be a teratogen. See TOXICOLOGICAL INFORMATION, Section 11.

SECTION 4 - FIRST AID MEASURES

Inhalation : Immediately remove person to fresh air. If breathing has stopped, give artificial respiration. If breathing is difficult, give oxygen by qualified medical personnel only. Seek immediate medical attention/advice.
Skin contact : Remove/Take off immediately all contaminated clothing. Wash exposed area thoroughly with soap and water for at least 15 minutes. Get medical attention.

- Eye contact** : Immediately flush eyes with plenty of water for at least 15 minutes. Lift upper and lower lids during flushing to ensure complete removal of chemical. Remove contact lenses. Seek immediate medical attention/advice.
- Ingestion** : Seek immediate medical attention/advice. Do not induce vomiting. Do not give liquids to drink. Never give anything by mouth to an unconscious person. If vomiting occurs spontaneously, keep victim's head lowered (forward) to reduce the risk of aspiration.

SECTION 5 - FIRE FIGHTING MEASURES

Fire hazards/conditions of flammability

- : Flammable aerosol. Will ignite when exposed to heat, flame and other sources of ignition. Closed containers are contained under pressure and may explode if exposed to excess heat for a prolonged period of time.

Flash point : 12.8°C / 55°F

Flash point Method : TCC

Auto-ignition temperature : N/Av

Lower flammable limit (% by vol.)

: 1 (Lower explosion limit)

Upper flammable limit (% by vol.)

: 12 (Upper explosion limit)

Oxidizing properties : None known.

Flame Projection Length : N/Av

Flashback observed : N/Av

Explosion data: Sensitivity to mechanical impact / static discharge

- : Not available.

Suitable extinguishing media: Dry chemical, foam, carbon dioxide and water fog.

Special fire-fighting procedures/equipment

- : Firefighters should wear proper protective equipment and self contained breathing apparatus with full face piece operated in positive pressure mode. Move containers from fire area if safe to do so. Water spray may be useful in cooling equipment exposed to heat and flame. Direct water or foam spray may cause frothing which can increase the intensity and range of the fire.

Hazardous combustion products

- : Carbon oxides; nitrogen oxides (NOx); Sulphur oxides; Phosphorus compounds; other unidentified organic compounds; irritating fumes and smoke.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal precautions : All persons dealing with clean-up should wear the appropriate protective equipment including self-contained breathing apparatus. Keep all other personnel upwind and away from the spill/release. Restrict access to area until completion of clean-up.

Environmental precautions : Ensure spilled product does not enter drains, sewers, waterways, or confined spaces.

Spill response/cleanup : Ventilate area of release. Remove all sources of ignition. Stop spill or leak at source if safely possible. Contain and absorb spilled liquid with non-combustible, inert absorbent material (e.g. sand), then place absorbent material into a container for later disposal (see Section 13). Large spills should be collected mechanically (remove by pumping) for disposal. Use only non-sparking tools and equipment in the clean-up process. Notify the appropriate authorities as required.

Prohibited materials : None known.

SECTION 7 - HANDLING AND STORAGE

Safe Handling procedures : Use in a well ventilated area. Wear suitable protective equipment during handling. Do not breathe vapors or spray mist. Avoid contact with skin, eyes and clothing. Keep away from heat and sources of ignition. Use proper bonding and grounding techniques when transferring liquid. Avoid contact with incompatible materials. Wash thoroughly after handling.

Storage requirements : Store in a cool, dry, well-ventilated area. Keep away from direct sunlight. Store away from areas of excessive heat, open flames, sparks, and other possible sources of ignition. Keep away from incompatibles. Keep containers tightly closed when not in use. Level 3 Aerosol.

Incompatible materials : Strong oxidizing agents; Strong acids; Alkali metals; Aluminium; Phosgene; Potassium oxides; Crotonaldehyde; Trinitromethane.

Special packaging materials : Always keep in containers made of the same materials as the supply container.

SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Limits

<u>Ingredients</u>	<u>ACGIH TLV</u>		<u>OSHA PEL</u>	
	<u>TWA</u>	<u>STEL</u>	<u>PEL</u>	<u>STEL</u>
Pale Oil	5mg/m ³ (As 'Oil mist, mineral')	10mg/m ³ (As 'Oil mist, mineral')	5mg/m ³ (As 'Oil mist, mineral')	N/Av
Naphtha	300ppm (VM&P Naphtha)	N/Av	300ppm (VM&P Naphtha) (final rule limit)	N/Av
IPA	200 ppm	400 ppm	400 ppm	N/Av
Carbon dioxide	5000 ppm	30000 ppm	5000 ppm	N/Av

Ventilation and engineering measures

: Provide mechanical ventilation in confined spaces. Use explosion-proof equipment.

Respiratory protection

: If the TLV is exceeded, a NIOSH/MSHA-approved respirator is advised.

Skin protection

: Impervious gloves must be worn when using this product. Advice should be sought from glove suppliers. Wear long sleeved shirt and pants to minimize exposed skin.

Eye / face protection

: Chemical safety glasses with side shields or splash proof goggles. A full face shield may also be necessary.

Other protective equipment

: Depending on conditions of use, an impervious apron should be worn. An eyewash station and safety shower should be made available in the immediate working area.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical state	: Liquid aerosol.	Appearance	: Colorless aerosol spray.
Odour	: Typical odor.	Odour threshold	: N/Av
pH	: N/Av	Specific gravity	: 0.83
Boiling point	: 80°C / 177°F - 500°F	Coefficient of water/oil distribution	: N/Av
Melting/Freezing point	: N/Av	Solubility in water	: Insoluble.
Vapour pressure (mmHg @ 20° C / 68° F)	: N/Av	Evaporation rate (n-Butyl acetate = 1)	: <1
Vapour density (Air = 1)	: >1	Volatiles (% by weight)	: N/Av
Volatile organic Compounds (VOC's)	: 367g/L	Viscosity	: N/Av
Absolute pressure of container	: N/Av		

SECTION 10 - REACTIVITY AND STABILITY DATA

Stability and reactivity	: Stable under the recommended storage and handling conditions prescribed. Hazardous polymerization does not occur.
Conditions to avoid	: Avoid heat and open flame. Temperatures above 49°C / 120°F.
Materials To Avoid And Incompatibility	: See Section 7 (Handling and Storage) section for further details.
Hazardous decomposition products	: None known, refer to hazardous combustion products in Section 5.

SECTION 11 - TOXICOLOGICAL INFORMATION

Toxicological data	: There is no available data for the product itself, only for the ingredients. See Section 2.
Carcinogenic status	: No components are listed as carcinogens by ACGIH, IARC, OSHA or NTP.

- Reproductive effects** : Not expected to have other reproductive effects.
- Teratogenicity** : This product contains Isopropanol. Animal evidence suggests Isopropanol may be fetotoxic at doses that are not maternally toxic.
- Mutagenicity** : Not expected to be mutagenic in humans.
- Sensitization to material** : Not expected to be a skin or respiratory sensitizer.
- Synergistic materials** : None known or reported by the manufacturer.
- Medical conditions aggravated by overexposure** : None known or reported by the manufacturer.
- Additional Health Hazards** : None reported by the manufacturer.

SECTION 12 - ECOLOGICAL INFORMATION

- Environmental effects** : The product should not be allowed to enter drains or water courses, or be deposited where it can affect ground or surface waters. No data is available on the product itself.
- Important environmental characteristics** : No data is available on the product itself.
- Ecotoxicological** : No data is available on the product itself.

SECTION 13 - DISPOSAL CONSIDERATIONS

- Handling for Disposal** : Handle waste according to recommendations in Section 7. Do not allow material to contaminate ground water system.
- Methods of Disposal** : Dispose of in accordance with federal, provincial and local hazardous waste laws. For assistance with your waste management needs, contact EMCO's Waste Services Division at (262) 658-4000.

SECTION 14 - TRANSPORTATION INFORMATION

Regulatory Information	UN Number	Shipping Name	Class	Packing Group	Label
TDG	UN1950	AEROSOLS	2.1	none	
TDG Additional information	May be shipped under Section 1.17 when packages are marked "Consumer Commodity". Must be a consumer-type product, in Limited Quantity size. Package weight must not exceed 30 kg gross.				
49CFR/DOT	None	Consumer Commodity	ORM-D	none	
49CFR/DOT Additional information	Must be a consumer-type product, in Limited Quantity size. Package weight must not exceed 30 kg gross.				

SECTION 15 - REGULATORY INFORMATION

Canadian Environmental Protection Act (CEPA) information: All ingredients listed appear on the Domestic Substances List (DSL).

Canadian WHMIS Classification:

Class A (Pressurized containers)

Class D2A (Materials Causing Other Toxic Effects, Very Toxic Material)

Class B5 (Flammable Aerosols)

Class D2B (Materials Causing Other Toxic Effects, Toxic Material)



This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

TSCA: All listed ingredients appear on the Toxic Substances Control Act (TSCA) inventory.

SECTION 16 - OTHER INFORMATION

- NFPA / HMIS Ratings** : Health: 1 Flammability: 3 Reactivity: 0 Personal Protection: X
- Legend** :
- ACGIH: American Conference of Governmental Industrial Hygienists
 - IARC: International Agency for Research on Cancer
 - N/A: not applicable
 - NIOSH: National Institute of Occupational Safety and Health
 - PEL: Permissible exposure limit
 - STEL: Short Term Exposure Limit
 - TLV: Threshold Limit Values
 - TSCA: Toxic Substance Control Act
 - CAS: Chemical Abstract Services
 - Inh: Inhalation
 - N/Av: not available
 - OSHA: Occupational Safety and Health Administration
 - RTECS: Registry of Toxic Effects of Chemical Substances
 - TDG: Canadian Transportation of Dangerous Goods Act & Regulations
 - TWA: Time Weighted Average
 - WHMIS: Workplace Hazardous Materials Identification System

References : Not available.

Prepared for: Direct all inquiries to: Sea Foam Sales Company, 12987 Pioneer Trail, Eden Prairie, MN, USA 55347, Telephone: (952) 938-4811

Prepared by: ICC The Compliance Center Inc. **Canada: 1-888-977-4834 USA: 1-888-442-9628**