SAFETY DATA SHEET

Applicable Authority: 29 C.F.R. § 1910.1200 (HazCom 2012)

SECTION 1. IDENTIFICATION

Product identifier used on the label : **Sea Foam Concentrated Fuel Injector Cleaner**

Product code(s) : IC5

Recommended use : Gasoline additive

Product Form : Mixture

Name, address, and telephone number of the supplier : **Sea Foam Sales Company**
510 North Chestnut Street
Chaska, MN, USA 55318
T (952) 938-4811

Emergency Telephone Number : INFOTRAC - (800) 535-5053 (Within Continental US) (8-4:30pm CST)

SECTION 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

GHS US classification

Flammable Liquid, Category 4
Skin Irritant, Category 2
Carcinogen, Category 2
Aspiration Hazard, Category 1

GHS Label elements, including precautionary statements

Hazard pictograms (GHS US)

Signal Word

Danger

Hazard statement(s)

H227 – Combustible liquid
H304 – May be fatal if swallowed and enters airways.
H315 – Causes skin irritation.
H351 – Suspected of causing cancer.

Precautionary statement(s)

P101 – If medical advice is needed, have product container or label at hand.
P102 – Keep out of reach of children.
P201 – Obtain special instructions before use.
P202 – Do not handle until all safety precautions have been read and understood.
P210+P403 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Store in a well-ventilated place.
P264 – Wash hands, forearms and face thoroughly after handling.
P 280 – Wear protective gloves/protective clothing/eye protection/face protection.
P308+P313 If exposed or concerned: Get medical advice/attention.
P301 + P310: IF SWALLOWED: Immediately call a poison center or doctor.
P331 – Do not induce vomiting.
P302+P352 IF ON SKIN: Wash with plenty of water.
P332-PP313 If skin irritation occurs: Get medical advice/attention.
P362+P364 – Take off contaminated clothing and wash it before reuse.
P405 –Store locked up.
P501 – Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Other Information

None.

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

Mixtures

Chemical Name	CAS #	Concentration (%)*
Distillates, petroleum, hydrotreated heavy paraffinic	64742-54-7	60 – 80
Solvent naphtha, petroleum, light aromatic	64742-95-6	7 – 13
Polyolefin alkyl phenol alkyl amine	Proprietary	7 – 13
1,3,4-Trimethylbenzene	95-63-6	1 – 5
2-Ethyl-1-hexanol	104-76-7	0.5 – 1.5
1,3,5-Trimethylbenzene	108-67-8	0.5 – 1.5
Cumene	98-82-8	0.1 – 1.0

SECTION 4. FIRST-AID MEASURES

Description of first aid measures

First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

First-aid measures after skin contact : IF ON SKIN: Wash with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.

First-aid measures after 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.

First-aid measures after ingestion : IF SWALLOWED: Immediately call a POISON CENTER/doctor. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation : May cause irritation to the respiratory tract.

Symptoms/effects after skin contact : Causes skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.

Symptoms/effects after eye contact : May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.

Symptoms/effects after ingestion : May be fatal if swallowed and enters airways. May result in aspiration into the lungs, causing chemical pneumonia. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Important symptoms : Suspected of causing cancer.

Immediate medical attention and special treatment, if necessary

: Symptoms may be delayed. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

SECTION 5. FIRE-FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray, fog, carbon dioxide, foam, dry chemical.

Unsuitable extinguishing media : Do not use a water jet since it may cause the fire to spread.

Specific hazards arising from the chemical

Fire hazard : Combustible liquid. Products of combustion may include, and are not limited to: oxides of carbon. Oxides of nitrogen. Oxides of sulfur. Irritating vapors.

Special protective equipment and precautions for fire-fighters

Firefighting instructions : Move containers away from the fire area if this can be done without risk. Cool closed containers exposed to fire with water spray.

Protection during firefighting : Keep upwind of fire. Wear full firefighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

General measures : Stop leak if safe to do so. Remove ignition sources. Absorb and/or contain spill with inert material (sand, vermiculite, or other appropriate material), then place in suitable container. Do not flush into surface water or sewer system. Wear recommended personal protective equipment.

Environmental precautions : Sweep or shovel spills into appropriate container for disposal. Provide ventilation.

Methods and material for containment and cleaning up

For contaminent : Absorb and/or contain spill with inert material (sand, vermiculite or other appropriate material), then place in suitable container. Do not flush into surface water or sewer system. Wear recommended personal protective equipment.

Methods for cleaning up : Absorb spills with vermiculite or other inert materials, then place in a container for chemical waste. Dike far ahead of larger spill for later recovery and disposal. In case of leakage, eliminate all ignition sources. Stop flow if possible.

Reference to other sections : For further information refer to section 8: "Exposure controls/personal protection".

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not swallow. Handle and open container with care. When using do not eat, drink or smoke. Use only in well-ventilated areas.

Handling temperature : ≤ 70 °C (158 °F)

Hygiene measures : Take off contaminated clothing and wash it before reuse. Wash hands, forearms and face thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep away from strong oxidizers. Keep out of the reach of children. Store locked up.

Storage temperature : ≤ 40 °C (104 °F).

NFPA 30B : No data available.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

Sea Foam Contentrated Fuel Injector Cleaner	
No additional information available.	
Distillates, petroleum, hydrotreated heavy paraffinic (64742-54-7)	
No additional information available.	
Solvent naphtha, petroleum, light aromatic (64742-95-6)	
No additional information available.	
Polyolefin alkyl phenol alkyl amine (Proprietary)	
No additional information available.	
1,3,4-Trimethylbenzene (95-63-6)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA [ppm]	10 ppm
ACGIH chemical category	Not Classifiable as a Human Carcinogen
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL TWA	125 mg/m³
NIOSH REL TWA [ppm]	25 ppm
1,3,5-Trimethylbenzene (108-67-8)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA [ppm]	10 ppm
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL TWA	125 mg/m³
NIOSH REL TWA [ppm]	25 ppm
2-Ethylhexanol (104-76-7)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA [ppm]	5 ppm
ACGIH chemical category	Confirmed Animal Carcinogen with Unknown Relevance to Humans
Isopropylbenzene (98-82-8)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Cumene
ACGIH OEL TWA [ppm]	5 ppm
Remark (ACGIH)	TLV® Basis: Eye, skin, & URT irr; CNS impair
ACGIH chemical category	Confirmed Animal Carcinogen with Unknown Relevance to Humans
Regulatory reference	ACGIH 2020
USA - OSHA - Occupational Exposure Limits	
Local name	Cumene
OSHA PEL TWA [1]	245 mg/m³
OSHA PEL TWA [2]	50 ppm
Limit value category (OSHA)	prevent or reduce skin absorption
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
USA - IDLH - Occupational Exposure Limits	
IDLH [ppm]	900 ppm (10% LEL)
USA - NIOSH - Occupational Exposure Limits	

NIOSH REL TWA	245 mg/m³
NIOSH REL TWA [ppm]	50 ppm
US-NIOSH chemical category	Potential for dermal absorption

Exposure limit values for the other components

Benzene (71-43-2)	
USA - OSHA - Occupational Exposure Limits	
Local name	Benzene
OSHA PEL TWA [2]	10 ppm 1 ppm
OSHA PEL STEL [2]	5 ppm (see 29 CFR 1910.1028)
OSHA PEL C [ppm]	25 ppm
Acceptable maximum peak above the acceptable ceiling concentration for an 8-hr shift	50 ppm Peak (10 minutes)
Remark (OSHA)	Benzene is subject to the standard 29 CFR 1910.1028 which may contain specific requirements for handling including protective equipment, regulated areas, monitoring and medical surveillance. The employer should review the standard and assure compliance with applicable requirements.
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-2

Appropriate engineering controls : Use adequate ventilation to keep oil mist below applicable standard. Ensure good ventilation of the work station. Provide readily accessible eye wash stations and safety showers.

Environmental exposure controls : Avoid release to the environment.

Individual protection measures/Personal protective equipment

Hand protection : Wear suitable gloves resistant to chemical penetration. Neoprene or nitrile rubber gloves. Wear insulated gloves when handling hot product. Consult glove manufacturer's product information on material suitability and material thickness.

Eye protection : Safety glasses or goggles are recommended when using product.

Skin and body protection : Wear suitable protective clothing.

Respiratory protection : Where mineral oil mists are generated – use full face respirator with organic vapor cartridge. In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. SDSs cannot provide detailed and complete respiratory protection guidelines. Selection of respiratory protection must be done by a qualified person who has assessed the work environment.

Other information : Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle in accordance with good industrial hygiene and safety procedures.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:
Liquid.

Appearance:
Pale yellow liquid.

Color:
Amber.

Odor:
Petroleum.

Odor threshold:
No data available.

pH:
No data available.

Melting point:

Vapor pressure:
0.0017 kPa @ 25°C / 68°F (.013 torr @ 25°C/68°F)

Relative vapor density at 20 °C:
No data available.

Relative density:
No data available.

Solubility:
Insoluble in water. Alcohols. Soluble in organic solvents.

Partition coefficient n-octanol/water:
No data available.

Auto-ignition temperature:
No data available.

Decomposition temperature:

No data available.

Freezing point:
No data available.

Boiling point:
209°C / 408°F

Flash point:
70 °C / 158°F (TCC)

Relative Evaporation rate (butyl acetate=1):
0

Flammability (solid, gas):
Combustible.

No data available.

Viscosity, kinematic:
≈ 20 mm²/s at 40 °C / 104 °F.

Viscosity, dynamic:
No data available.

Explosion limits:
No data available.

Explosive properties:
No data available.

Oxidizing properties:
No data available.

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Not reactive under normal conditions of use.

Chemical stability : Stable under normal conditions. May form flammable/explosive vapour-air mixture.

Possibility of hazardous reactions : No dangerous reactions known under normal conditions of use.

Conditions to avoid : Heat. Sources of ignition. Incompatible materials.

Incompatible materials : Strong oxidizers. Strong reducing agents.

Hazardous decomposition products : May include, and are not limited to: oxides of carbon. Oxides of sulfur. Oxides of nitrogen. Irritating vapours. May release flammable gases. Smokes.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity (oral) : Not classified

Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified

Distillates, petroleum, hydrotreated heavy paraffinic (64742-54-7)	
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), Guideline: OECD Guideline 420 (Acute Oral Toxicity - Fixed Dose Method)
LD50 dermal rabbit	> 5000 mg/kg
Solvent naphtha, petroleum, light aromatic (64742-95-6)	
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat	3400 ppm/4h
ATE CA (Gases)	3400 ppmv/4h
Polyolefin alkyl phenol alkyl amine (Proprietary)	
LD50 oral rat	> 5000 mg/kg (OECD 423 method)
LD50 dermal rat	> 2000 mg/kg (OECD 402 method)
1,3,4-Trimethylbenzene	
LD50 oral rat	3280 mg/kg
LD50 dermal rabbit	> 3160 mg/kg
LC50 inhalation rat	18 g/m³ (Exposure time: 4 h)
ATE CA (oral)	3280 mg/kg bodyweight
ATE CA (Gases)	4500 ppmv/4h
ATE CA (vapours)	18 mg/l/4h
ATE CA (dust, mist)	1.5 mg/l/4h
1,3,5-Trimethylbenzene (108-67-8)	
LD50 oral rat	6000 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: EU Method B.1 (Acute Toxicity (Oral)), 95% CL: 4920 - 7320
LC50 inhalation rat	24 g/m³ (Exposure time: 4 h)
ATE CA (oral)	6000 mg/kg bodyweight

Distillates, petroleum, hydrotreated heavy paraffinic (64742-54-7)	
ATE CA (vapours)	24 mg/l/4h
ATE CA (dust, mist)	24 mg/l/4h
2-Ethylhexanol (104-76-7)	
LD50 oral rat	3730 mg/kg
LD50 dermal rabbit	1980 mg/kg
LC50 inhalation rat	0.89 – 5.3 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), Remarks on results: other:
LC50 inhalation rat	> 227 ppm (Exposure time: 6 h)
ATE CA (oral)	3730 mg/kg bodyweight
ATE CA (Dermal)	1980 mg/kg bodyweight
ATE CA (Gases)	4500 ppmv/4h
ATE CA (vapours)	11 mg/l/4h
ATE CA (dust, mist)	1.5 mg/l/4h

Isopropylbenzene (98-82-8)	
LD50 oral rat	1400 mg/kg
LD50 dermal rabbit	12300 µl/kg
LC50 inhalation rat	> 3577 ppm (Exposure time: 6 h)
ATE CA (oral)	1400 mg/kg bodyweight
ATE CA (Dermal)	12300 mg/kg bodyweight

Skin corrosion/irritation : Causes skin irritation.

Serious eye damage/irritation : Not classified.

Respiratory or skin sensitization : Not classified.

Germ cell mutagenicity : Not classified.

Carcinogenicity : Suspected of causing cancer.

Isopropylbenzene (98-82-8)	
IARC group	2B - Possibly carcinogenic to humans
National Toxicology Program (NTP) Status	Reasonably anticipated to be Human Carcinogen, Evidence of Carcinogenicity
In OSHA Hazard Communication Carcinogen list	Yes

Reproductive toxicity : Not classified.

Specific target organ toxicity – single exposure : Not classified.

Solvent naphtha, petroleum, light aromatic (64742-95-6)	
Specific target organ toxicity – single exposure	May cause drowsiness or dizziness.
1,3,4-Trimethylbenzene	
Specific target organ toxicity – single exposure	May cause respiratory irritation.
1,3,5-Trimethylbenzene (108-67-8)	
STOT-single exposure	May cause respiratory irritation.
2-Ethylhexanol (104-76-7)	
STOT-single exposure	May cause respiratory irritation.
Isopropylbenzene (98-82-8)	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure : Not classified.

Distillates, petroleum, hydrotreated heavy paraffinic (64742-54-7)	
LOAEL (oral, rat, 90 days)	125 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
1,3,4-Trimethylbenzene	
NOAEL (oral, rat, 90 days)	600 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
NOAEC (inhalation, rat, vapour, 90 days)	1.8 mg/l air Animal: rat, Guideline: OECD Guideline 452 (Chronic Toxicity Studies)
1,3,5-Trimethylbenzene (108-67-8)	

Isopropylbenzene (98-82-8)	
NOAEL (oral, rat, 90 days)	600 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
NOAEC (inhalation, rat, vapour, 90 days)	1.8 mg/l air Animal: rat, Guideline: OECD Guideline 452 (Chronic Toxicity Studies)
2-Ethylhexanol (104-76-7)	
NOAEL (oral, rat, 90 days)	250 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEC (inhalation, rat, gas, 90 days)	120 ppm Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)
Aspiration hazard	: May be fatal if swallowed and enters airways.

Sea Foam Concentrated Fuel Injector Cleaner	
Viscosity, kinematic	: ≈ 13 mm²/s @ 40 °C
Symptoms/effects after inhalation	: May cause irritation to the respiratory tract.
Symptoms/effects after skin contact	: Causes skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.
Symptoms/effects after eye contact	: May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.
Symptoms/effects after ingestion	: May be fatal if swallowed and enters airways. May result in aspiration into the lungs, causing chemical pneumonia. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Other information	: Likely routes of exposure: ingestion, inhalation, skin and eye.

SECTION 12. ECOLOGICAL INFORMATION

Toxicity

Ecology - general : May cause long-term adverse effects in the aquatic environment.

Distillates, petroleum, hydrotreated heavy paraffinic (64742-54-7)	
LC50 fish 1	> 5000 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
EC50 Daphnia 1	> 1000 mg/l (Exposure time: 48 h - Species: Daphnia magna)
Solvent naphtha, petroleum, light aromatic (64742-95-6)	
LC50 fish 1	9.22 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
EC50 Daphnia 1	6.14 mg/l (Exposure time: 48 h - Species: Daphnia magna)
Polyolefin alkyl phenol alkyl amine (Proprietary)	
ErC50 algae	5.4 mg/l
NOEC (chronic)	3.38 mg/l 21 days; Daphnia
1,3,4-Trimethylbenzene	
LC50 - Fish [1]	7.19 – 8.28 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 - Crustacea [1]	6.14 mg/l (Exposure time: 48 h - Species: Daphnia magna)
1,3,5-Trimethylbenzene (108-67-8)	
LC50 fish 1	3.48 mg/l (Exposure time: 96 h - Species: Pimephales promelas)
NOEC (chronic)	0.4 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
2-Ethylhexanol (104-76-7)	
LC50 - Fish [1]	32 – 37 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
EC50 - Crustacea [1]	39 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 - Fish [2]	> 7.5 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)

Isopropylbenzene (98-82-8)	
LC50 - Fish [1]	6.04 – 6.61 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 - Crustacea [1]	0.6 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 - Fish [2]	4.8 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])
EC50 - Crustacea [2]	7.9 – 14.1 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
NOEC (chronic)	0.35 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	0.38 mg/l Test organisms (species): other:D. rerio and P. promelas Duration: '28 d'

Persistence and degradability of Sea Foam Concentrated Fuel Injector Cleaner not established.
Bioaccumulative potential of Sea Foam Concentrated Fuel Injector Cleaner not established.

1,3,4-Trimethylbenzene (95-63-6)	
Partition coefficient n-octanol/water	3.63
2-Ethylhexanol (104-76-7)	
Partition coefficient n-octanol/water	2.9 (at 25 °C (at pH 7)
Isopropylbenzene (98-82-8)	
BCF fish 1	35.5
Partition coefficient n-octanol/water	3.7

Mobility in soil : No additional information available.

Other adverse effects : No other effects known.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Methods

Product/Packaging disposal recommendations : Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. Empty containers or liners may retain some product residues.

Additional Information : Handle empty containers with care because residual vapours are flammable.

SECTION 14. TRANSPORTATION INFORMATION

Department of Transportation (DOT) : In accordance with DOT

DOT NA No : NA1993

Proper Shipping Name (DOT) : Combustible liquid, n.o.s. (limited quanity)

Transport Hazard Class : Combustible liquid

Packing Group (DOT) : III

Environmental Hazards

Other Information : No supplementatry informtion available.

Special Precautions for User : Do not handle until all safety precautions have been read and understood.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not applicable.

SECTION 15. REGULATORY INFORMATION

US Federal regulations : All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

International regulations : All components of this product are listed, or excluded from listing, on the Canadian DSL (Domestic Substances List) and NDSL (Non-Domestic Substances List) inventories

US State regulations

⚠ **WARNING:** : This product can expose you to Benzene, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

SECTION 16. OTHER INFORMATION

Disclaimer: Sea Foam Sales Company cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.