1.1 Product Identifiers

Product Name : Synthetic Coolant S-122

1.2 Product usage

Recommended Usage : Not available
Restricted Usage : Not known

1.3 Emergency support

Emergency Support : CHEMTREC
United States +1(800) 424-9300
International +01(703) 527-3887

1.4 Supplier Information

David Weber Oil Company
601 Industrial Road
Carlstadt, NJ 07072

Phone: 201-438-7333
Fax: 201-438-3178
Email: sales@weberoil.com

Section 2- Hazards Identification

Physical Hazards	Not Classified	
Health Hazards	Acute toxicity, oral	Category 4
	Skin corrosion/irritation	Category 1
	Serious eye damage/eye irritation	Category 1
	Sensitization, skin	Category 1
	Specific target organ toxicity, single exposure	Category 3 respiratory tract irritation
Environmental Hazards	Not classified.	
OSHA Defined Hazards	Not classified.	

Label Elements

Signal Word Danger

Hazard Statement Harmful if swallowed. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Causes serious eye damage. May cause respiratory irritation.

Precautionary statement

Prevention Do not breathe mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/protective clothing/ eye protection/face protection.

Response If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Remove all contaminated clothing immediately. Rinse skin with water/shower. If inhaled: Remove person to fresh air. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses. Continue rinsing. Immediately calla poison center/doctor. If skin irritation or rash occurs: get medical attention.

Storage Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise Classified (HNOC) None known.

Supplemental information 84.7% of the mixture consists of component(s) of unknown acute oral toxicity. 92.6% of the mixture consists of component(s) of unknown acute inhalation toxicity.

Section 3 - Composition/ Information on Ingredients

3.1 Substance details

Chemical Name	CAS#	%Weight
2-aminoethanol	141-43-5	2-5%
Triethanolamine	102-71-6	2-5%
Other Components below reportable levels		40-45%

Section 4 – First aid Measures

4.1 First aid measures

Inhalation **:** Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a Poison center or doctor/physician if you feel unwell.

Skin Contact **:** Remove contaminated clothing immediately and wash skin with soap and water. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.

Eye Contact **:** Immediately flush eyes with plenty of water for at least 15 minutes. Check and remove any contact lenses. Continue to rinse for at least 20 minutes. Call a physician or poison control center immediately.

Ingestion **:** Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Most Important symptoms/ Effects, acute and delayed **:** Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation.

Indication of immediate medical attention and special treatment needed **:** Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

General Information **:** If you feel unwell, seek medical advice (show the label were possible). Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

Section 5 – Fire Fighting

Suitable extinguishing media	**:** Water fog. Foam. Dry Chemical Powder. Carbon dioxide (CO2)
Unsuitable extinguishing media	**:** Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	**:** During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	**:** Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/ instructions	**:** Move containers from fire area if you can do so without risk.
Specific methods	**:** Use standard firefighting procedures and consider the hazards of other involved materials.
Specific methods	**:** Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	**:** No unusual fire or explosion hazards noted.

Section 6 - **Accidental ReleaseMeasures**

Personal precautions, protective equipment and emergency procedures	**:** Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean up. Do not breather mist or vapor. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 9 of the SDS.
Methods and materials for containment and cleaning up	**:** This product is miscible in water. Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water Small Spills: wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use. For waste disposal, see section 13 of SDS.
Environmental precautions	**:** Avoid discharge into drains, water courses or onto ground.

Section 7 - **Handling & Storage**

Precautions for safe handling	**:** Provide adequate ventilation. Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. Do not taste or swallow. When using, do not eat, drink or smoke. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	**:** Store locked up. Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS.)

Section 8 - **Exposure Control/ Personal Protection**

Occupational exposure limits		
Components	**Type**	**Value**
US OSHA Table Z-1 Limits for Air Contaminants	**(29 CFR 1910.1000)**	
2-aminoethanol (CAS 141-43-5)	PEL	6 mg/m^3
		3 ppm
US ACGIH Threshold Limit Values		
2-aminoethanol (CAS 141-43-5)	STEL	6ppm
	TWA	3 PPM
Triethanolamine (CAS 102-71-6)	TWA	5mg/m^3
US. NIOSH: Pocket Guide to Chemical Hazards		
2-aminoethanol (CAS 141-43-5)	STEL	15 mg/m^3
		6 ppm
	TWA	8mg/m^3
		3 ppm

Biological limit values **:** No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls **:** Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face protection **:** Wear safety glasses with side shields (or goggles) and a face shield.

Skin protection

Hand protection **:** Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

Other **:** Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection **:** In case of insufficient ventilation, wear suitable respiratory equipment. Chemical respirator with organic vapor cartridge.

Thermal hazards **:** Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations **:** Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

Section 9 - **Physical & Chemical Properties**

Appearance	**:** Clear
Physical state	**:** Liquid
Form	**:** Liquid
Color	**:** Blue
Odor	**:** Slight
Odor threshold	**:** Not available
pH	**:** 10.2
Melting Point/Freezing Point	**:** 61.22 °F (16.23°C) estimated
Initial Boiling Point / Range	**:** 212°F (100°C)
Flash Point	**:** >221.0 °F (>100.0°C) Cleveland Open Cup
Evaporation rate	**:** Not available
Flammability (solid, gas)	**:** Not applicable
Upper/lower flammability or explosive limits	
Flammability Limit - lower (%)	**:** Not available
Flammability Limit - upper (%)	**:** Not available
Explosive Limit – lower (%)	**:** Not available
Explosive Limit- upper (%)	**:** Not available
Vapor pressure	**:** Not available
Vapor density	**:** Not available
Relative Density	**:** Not available
Solubility (water)	**:** Soluble in water
Partition coefficient (n-ocatnol/water)	**:** Not available
Auto-ignition temperature	**:** Not available
Decomposition temperature	**:** Not available
Viscosity	**:** Not available
Other information	
Density	**:** 8.90 lbs/gal
Explosive properties	**:** Not explosive
Flammability class	**:** Combustible IIIB estimated
Flash Point class	**:** Combustible IIIB
Oxidizing properties	**:** Not oxidizing
Specific gravity	**:** 1.06 - 1.08

Section 10 - Stability **& Reactivity**

Reactivity	**:** The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	**:** Material is stable under normal conditions.
Possibility of hazardous reactions	**:** No dangerous reaction known under normal conditions.
Conditions to avoid	**:** Contact with incompatible materials
Incompatible materials	**:** Strong acids. Strong oxidizing agents. Peroxides. Phenols.
Hazardous decomposition products	**:** Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

Section 11- Toxicological Information

Information on likely routes of exposure

Inhalation	**:** May cause irritation to the respiratory system. Prolonged inhalation may be harmful.
Skin Contact	**:** Causes severe skin burns. May cause an allergic skin reaction. Prolonged or repeated exposure may cause liver and kidney damage. These effects have not been observed in humans
Eye Contact	**:** Causes serious eye damage.
Ingestion	**:** Causes digestive tract burns. Harmful if swallowed.
Symptoms related to the physical chemical and toxicological characteristics	**:** Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation.

Information on toxicological effects

Acute toxicity **:** In high concentrations, vapors are anesthetic and may cause headache, fatigue, dizziness and central nervous system effects. Harmful if swallowed. May cause and allergic skin reaction. May cause respiratory irritation.

Product	**Species**	**Test Results**
Synthetic Coolant S-122		
Acute		
Dermal		
LD50	Rabbit	14950 mg/kg estimated
Oral		
LD50	Guinea pig	8332 mg/kg estimated
	Mouse	10938 mg/kg estimated
	Rat	57 g/kg estimated
Components	**Species**	**Test Results**
2-aminoethonol (CAS 141-43-5)		
Acute		
Dermal		
LD50	Rabbit	1025 mg/kg
Oral		
LD50	Guinea pig	620 mg/kg
	Mouse	700 mg/kg
	Rat	10.2 g/kg
Triethanolamine (CAS 102-71-6)		
Acute		
Dermal		
LD50	Rabbit	>20000 mg/kg
Oral		
LD50	Guinea pig	5300 mg/kg
	Rat	8 g/kg

*Estimates for product may be based on additional component data not shown.

Section 11- Toxicological Information continued

Skin corrosion/irritation : Causes severe skin burns and eye damage.
Serious eye damage/eye irritation : Causes serious eye damage.
Respiratory or skin sensitization
Respiratory sensitization : Not a respiratory sensitizer.
Skin sensitization : May cause and allergic skin reaction.
Germ cell mutagenicity : No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity : This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Mono graphs. Overall Evaluation of Carcinogenicity
Triethanolamine (CAS 102-71-6)
OSHA Specifically regulated Substances (29 CFR 1910.1001-1050)
Not listed
US National Toxicology Program (NTP) Report on Carcinogens
Not available

Reproductive toxicity : This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity-single exposure : May cause respiratory irritation
Specific target organ toxicity-repeated exposure : Not classified
Aspiration hazard : Not an aspiration hazard
Chronic effects : May be harmful if absorbed through skin. Prolonged inhalation may be harmful. Prolonged or repeated exposure may cause liver and kidney damage. These effects have not been observed in humans.

Section 12 - **Ecological Information**

Ecotoxicity : The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have harmful or damaging effect on the environment.

Product		**Species**	**Test Results**
Synthetic Coolant S-122			
Aquatic			
Crustacea	EC50	Daphnia	6350.562 mg/l, 48 hours estimated
Fish	LC50	Fish	6571.0845 mg/l, 96 hours estimated
Components		**Species**	**Test Results**
2-aminoethonol (CAS 141-43-5)			
Aquatic			
Fish	LC50	Rainbow trout, donaldson trout (Oncorhynchus mykiss)	114-196 mg/l, 96 hours
Triethanolamine (CAS 102-71-6)			
Aquatic			
Crustacea	EC50	Water flea (Ceriodaphnia dubia)	565.2 - 658.3 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	10610 – 13010 mg/l, 96 hours

*Estimates for product may be based on additional component data not shown

Section 12 - **Ecological Information Continued**

Persistence and degradability : No data is available on the degradability of this product.

Bioaccumulative potential

Partition coefficient n-octanol/water (low Kow)

2-aminoethonol	-1.21
Triethanolamine	-1

Mobility in soil : No data available

Other adverse effects : No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

Section 13 - **Disposal Considerations**

Disposal instructions : Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/ international regulations.

Local disposal regulations : Dispose in accordance with all applicable regulations.

Hazardous waste code : The waste code should be assigned in discussion between the user, the producer and the waste disposal company

Waste from residues/ unused products : Dispose of in accordance with local regulations. Empty containers or liner may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging : Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

Section – 14 Transportation Information

DOT	Not regulated as dangerous goods
TDG	Not regulated as dangerous goods
IMDG	Not regulated as dangerous goods
IATA	Not regulated as dangerous goods
Transport in bulk tankers According to Annex II of MARPOL 73/78 and the IBC Code	Not established

Section 15 - Regulatory Information

US Federal regulations This product is a "Hazardous chemical" as defined by the OSHA Hazard communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List.

CERCLA Hazardous Substance List (40 CFR 302.4)	Not listed
SARA 304 Emergency release notification	Not regulated
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)	Not listed

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories	Immediate Hazard – Yes Delayed Hazard – No Fire Hazard – No Pressure Hazard – No Reactivity Hazard – No
SARA 302 Extremely hazardous substance	Not listed
SARA 311/312 Hazardous Chemical	No
SARA 313 (TRI reporting)	Not regulated

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List	Not regulated
Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)	Not regulated
Safe Drinking Water Act (SDWA)	Not regulated

US state regulations

US. California Controlled substances. CA Department of Justice (California Health and Safety Code Section 11100)	Not Listed
US. Massachusetts RTK- Substance list	2-aminoethanol (CAS 141-43-5) Triethanolamine (CAS 102-71-6)
US. New Jersey Worker and Community Right-to-Know Act	2-aminoethanol (CAS 141-43-5) Triethanolamine (CAS 102-71-6)
US. Pennsylvania Worker and Community Right-to-Know Act	2-aminoethanol (CAS 141-43-5) Triethanolamine (CAS 102-71-6)
US. Rhode Island RTK	Not regulated
US. California Proposition 65	California Safe Drinking Water and toxic enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

Country(s) or region	Inventory name	On Inventory *
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" Indicates that one or more components of the products are not listed or exempt from listing on the inventory administered by the governing country(s)

Section 16 - OtherInformation

Issue date	11/18/2015
Revision date	11/02/2016
HMIS ratings	Health: 2 Flammability: 1 Physical Hazard: 0 Personal protection: D
NFPA ratings	Health: 2 Flammability: 1 Instability: 0

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