according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 12.20.2014

Softener Test Solution

SECTION 1: Identification of the substance/mixture and of the supplier

Product name:

Softener Test Solution

Manufacturer/Supplier Article number: SF8050SS

Recommended uses of the product and restrictions on use: Laboratory chemicals

Manufacturer Details:

AquaPhoenix Scientific, Inc. 860 Gitts Run Road Hanover, PA 17331 1-717-632-1291

Emergency telephone number:

ChemTel: (24-hour)

+1(800)255-3924 +1(813)248-0585 (International)

SECTION 2: Hazards identification

Classification of the substance or mixture:



Flammable Flammable liquids, category 3

Flammable Liquids Cat. 3.

Signal word: Warning

Hazard statements:

Flammable liquid and vapour.

Precautionary statements:

If medical advice is needed have product container or label at hand. Keep out of reach of children. Read label before use. Keep away from heat/sparks/open flames/hot surfaces. No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/light/equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. In case of fire, use agents recommended in section 5 for extinction. Store in a well ventilated place. Keep cool. Dispose of contents and container to an approved waste disposal plant.

Other Non-GHS Classification: None

SECTION 3: Composition/information on ingredients

Ingredients:

according to 29CFR1910/1200 and GHS Rev. 3

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Softener Test Solution				
Ingredients:				
CAS 1787-61-7	Eriochrome Black T Indicator	0.04 %		
CAS 6381-92-6	Disodium EDTA, Dihydrate	0.16 %		
CAS 29932-54-5	Disodium Magnesium EDTA	0.059 %		
CAS 7732-18-5	Deionized Water	10 %		
CAS 64-17-5	Ethanol	<17 %		
CAS 102-71-6	Triethanolamine	73 %		
Percentages are by weight				

SECTION 4: First aid measures

Description of first aid measures

After inhalation:

Loosen clothing as necessary and position individual in a comfortable position. Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult give oxygen. Do not perform mouth-to-mouth on an unconscious person.

After skin contact:

Wash hands and exposed skin with soap and plenty of water. Seek medical attention immediately.

After eye contact:

Protect unexposed eye. Rinse or flush exposed eye gently using water for 15-20 minutes. Remove contact lenses, if present and easy to do, and continue rinsing. Occasionally lift the upper and lower eyelids while rinsing. Seek medical attention immediately.

After swallowing:

Rinse mouth thoroughly. Do not induce vomiting. Never give anything by mouth to an unconscious person. Seek medical attention immediately.

Most important symptoms and effects, both acute and delayed:

Irritation- all routes of exposure. May cause burning and stinging irritation and possible damage to cornea and conjunctiva. Skin. Results in cracking and burning which may lead to secondary infections and dermatitis. Ingestion. May cause nausea, vomiting, cramps, and diarrhea. Inhalation. May cause mild irritation of the mucous membrane and upper respiratory tract. Headache. Shortness of breath. Eyes. Repeated ingestion of Triethanolamine has caused kidney and liver damage.

Indication of any immediate medical attention and special treatment needed:

If seeking medical attention, provide SDS document to physician.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing agents:

Use water, dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam.

Unsuitable extinguishing agents:

Water may be ineffective on fire.

Special hazards arising from the substance or mixture:

Carbon oxides. Nitrogen oxides. Flashback along vapor trail may occur.

Advice for firefighters:

according to 29CFR1910/1200 and GHS Rev. 3

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Protective equipment:

Wear protective eyewear, gloves, and clothing.

Additional information (precautions):

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. Fire Fighting Instructions. Do not inhale gases, fumes, dust, mist, vapor, and aerosols. Avoid contact with skin, eyes and clothing. Use normal procedures. Use protective clothing. Use NIOSH approved breathing equipment.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Keep product and empty container away from heat and sources of ignition. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling. Ensure adequate ventilation.

Environmental precautions:

Should not be released into environment.

Methods and material for containment and cleaning up:

Soak up with inert absorbent material. Keep in suitable closed containers for disposal. Collect contaminated soil for characterization per Section 13. If necessary use trained response staff or contractor.

Reference to other sections: None

SECTION 7: Handling and storage

Precautions for safe handling:

Do not eat, drink, smoke, or use personal products when handling chemical substances. Avoid splashes or spray in enclosed areas. Wear protective eyewear, gloves, and clothing. Wash hands after handling. Avoid contact with skin and eyes.

Conditions for safe storage, including any incompatibilities:

Store away from acids. Store product and empty container away from heat and sources of ignition. Store away from food. Keep container tightly closed in a cool, dry, and well-ventilated area. Store in inert atmosphere. Store with like hazards. Store away from incompatible materials.

SECTION 8: Exposure controls/personal protection









Control parameters:	102-71-6, Triethanolamine ACS., ACGIH 5 mg/m ³ TWA.
Appropriate engineering controls:	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor or mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.
Respiratory protection:	Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls.
Protection of skin:	Select glove material impermeable and resistant to the substance. Select glove material based on rates of diffusion and degradation. Wear protective clothing.
Eye protection:	Safety glasses with side shields or goggles.

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General hygienic measures:	Before re-wearing, wash contaminated clothing. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash hands before breaks and at the end of work. Follow Chemical Hygiene Plan. Wash hands and exposed skin with soap and plenty of water. Remove contaminated clothing and shoes.		

SECTION 9: Physical and chemical properties

Appearance (physical state, color):	Dark, Blue Liquid	Explosion limit lower: Explosion limit upper:	Not determined Not determined
Odor:	Alcohol	Vapor pressure at 20°C:	Not determined
Odor threshold:	Not determined	Vapor density:	Not determined
pH-value:	Not determined	Relative density:	Not determined
Melting/Freezing point:	Not determined	Solubilities:	Not Determined
Boiling point/Boiling range:	Not determined	Partition coefficient (n- octanol/water):	Not determined
Flash point (closed cup):	~32C	Auto/Self-ignition temperature:	Not determined
Evaporation rate:	Not determined	Decomposition temperature:	Not determined
Flammability (solid, gaseous):	Flammable	Viscosity:	a. Kinematic: Not determined b. Dynamic: Not determined
Density at 20°C:	Not determined		

SECTION 10: Stability and reactivity

Reactivity: None Chemical stability:

Hygroscopic air sensitive.

Possible hazardous reactions:

None under normal processing.

Conditions to avoid:

Incompatible materials. Heat, hot surfaces, open flames, and sources of ignition.

Incompatible materials:

Oxidizers, aldehydes, heat, sparks, open flame. Will attack some forms of rubber, plastics, and coatings. May react with metallic aluminum and generate hydrogen gas.

Hazardous decomposition products:

Carbon oxides. Nitrous oxides. Hydrogen cyanide. Formaldehyde.

SECTION 11: Toxicological information

Acute Toxicity:

Dermal:

LD50 > 22.5 g/kg (Triethanolamine) Rabbit:.

Chronic Toxicity: No additional information. Skin corrosion/irritation: No additional information. Serious eye damage/irritation: No additional information.

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Respiratory or skin sensitization:

May cause sensitization by skin contact. Irritation: Causes eye irritation

Carcinogenicity:

Triethanolamine.: Liver - Irregularities - Based on Human Evidence

Germ cell mutagenicity:

Other Adverse Effects: Tumorigenic effects have been reported in experimental animals.

Reproductive Toxicity: No additional information.

STOT-single and repeated exposure: No additional information.

Additional toxicological information:

No additional information.

SECTION 12: Ecological information

Ecotoxicity:

Freshwater Algae, 72 Hr EC50 Desmodesmus subspicatus: 216 mg/L; 96 Hr EC50 Desmodesmus subspicatus: 169 mg/L.

Freshwater Fish, 96-Hr LC50 Pimephales promelas: 10600 - 13000 mg/L [flow-through]; 96-Hr LC50 Pimephales promelas: > 1000 mg/L [static]; 96-Hr LC50 Lepomis macrochirus: 450 - 1000 mg/L [static].

Persistence and degradability:

Readily biodegradable.

Bioaccumulative potential: No additional information. **Mobility in soil**:

Aqueous solution has high mobility in soil: -2.53.

Other adverse effects: No additional information.

SECTION 13: Disposal considerations

Waste disposal recommendations:

Do not allow product to reach sewage system or open water. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Place in container for disposal according to local regulations (see section 13). Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations. Ensure complete and accurate classification.

SECTION 14: Transport information

US DOT

Bulk:	Non Bulk:
Limited Quantity Exception:	None
UN Number: ADR, ADN, DOT, IMDG, IATA	1993

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RQ (if applicable): None RQ (if applicable): None Proper shipping Name: Flammable Liquid, Proper shipping Name: Flammable Liquid, N.O.S. (Ethanol Solution). N.O.S. (Ethanol Solution). Hazard Class: 3 Hazard Class: 3 Packing Group: III. Packing Group: III. Marine Pollutant (if applicable): No Marine Pollutant (if applicable): No additional information. additional information. **Comments:** None **Comments:** None





SECTION 15: Regulatory information

United States (USA)

SARA Section 311/312 (Specific toxic chemical listings):

Fire

SARA Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

RCRA (hazardous waste code):

None of the ingredients are listed.

TSCA (Toxic Substances Control Act) :

All ingredients are listed.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):

None of the ingredients are listed.

Proposition 65 (California):

Chemicals known to cause cancer:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

Canada

Canadian Domestic Substances List (DSL) :

All ingredients are listed.

SECTION 16: Other information

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. Note. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation

according to 29CFR1910/1200 and GHS Rev. 3

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to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

NFPA: 1-0-0

HMIS: 1-0-0

GHS Full Text Phrases: None

Abbreviations and Acronyms:

- IMDG International Maritime Code for Dangerous Goods.
- PNEC. Predicted No-Effect Concentration (REACH).
- CFR Code of Federal Regulations (USA)
- SARA Superfund Amendments and Reauthorization Act (USA).
- RCRA. Resource Conservation and Recovery Act (USA).
- TSCA. Toxic Substances Control Act (USA).
- NPRI National Pollutant Release Inventory (Canada).
- DOT US Department of Transportation.
- IATA International Air Transport Association.
- GHS Globally Harmonized System of Classification and Labelling of Chemicals.
- ACGIH American Conference of Governmental Industrial Hygienists
- CAS Chemical Abstracts Service (division of the American Chemical Society).
- NFPA National Fire Protection Association (USA).
- HMIS Hazardous Materials Identification System (USA).
- WHMIS Workplace Hazardous Materials Information System (Canada).
- DNEL Derived No-Effect Level (REACH).