Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 02.07.2015

Versene 100 Solution

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

Product name: Versene 100 Solution

Manufacturer/Supplier Article number: VR1000SS

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:

Corrosive
Serious eye damage, category 1
Skin corrosion, category 1A
Corrosive to metals, category 1

Irritant
Acute toxicity (oral, dermal, inhalation), category 4

Acute Tox. 4 (Oral).
Serious Eye Damage Cat. 1.
Hazards Not Otherwise Classified - Combustible Dust.
Skin corrosion/irritation - Skin Corr. 1A.
Corrosive to metals 1.

Signal word: Danger

Hazard statements:

May be corrosive to metals.
Harmful if swallowed.
Causes serious eye damage.
Causes severe skin burns and eye damage.

Precautionary statements:

Read label before use.
If medical advice is needed have product container or label at hand.
Keep out of reach of children.
Wear protective gloves/protective clothing/eye protection/face protection.
Do not eat, drink or smoke when using this product.
Wash skin thoroughly after handling.
Do not breathe dust/fume/gas/mist/vapors/spray.
Keep only in original container.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

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IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Specific treatment (see supplemental first aid instructions on this label).
Absorb spillage to prevent material damage.
If eye irritation persists get medical advice/attention.
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
Rinse mouth.
Immediately call a POISON CENTER or doctor/physician.
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
Wash contaminated clothing before reuse.
Store in corrosive resistant stainless steel container with a resistant inner liner.
Store locked up.
Dispose of contents and container as instructed in Section 13.

Other Non-GHS Classification: None

SECTION 3: Composition/information on ingredients

Ingredients:

Ingredients:		
CAS 194491-31-1	Ethylenediaminetetraacetic acid tetrasodium salt	79.59-79.6 %
CAS 1310-73-2	Sodium Hydroxide, ACS	20.4-20.41 %
CAS 7732-18-5	Deionized Water	0 %
		Percentages are by weight

SECTION 4: First aid measures

Description of first aid measures

After inhalation:

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. Loosen clothing as necessary and position individual in a comfortable position. Move exposed to fresh air. Give artificial respiration if necessary. If breathing is difficult give oxygen. DO NOT use mouth-to-mouth resuscitation without a barrier device to prevent responder from receiving burns.

After skin contact:

Rinse/flush exposed skin gently using soap and water for 15-20 minutes. Rinse or flush skin/hair gently with water for an additional 10 minutes. Seek immediate medical attention.

After eye contact:

Protect unexposed eye. Remove contact lens(es) if able to do so during rinsing. Rinse or flush eye gently with water for at least 30 minutes, lifting upper and lower lids. Seek immediate medical attention (ophthalmologist).

After swallowing:

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician. Do not induce vomiting. Give alert victim sips of water. Call POISON CENTER or Emergency Response for medical attention/Advice immediately upon exposure while undertaking response measures.

Most important symptoms and effects, both acute and delayed:

Nausea. Headache. Shortness of breath. Irritation/burns, all routes of exposure. May cause severe burns, blindness and/or permanent damage. May cause burns, deep penetrating ulcerations of the skin, delayed tissue destruction, redness, pain. May cause gastrointestinal irritation with nausea, vomiting and diarrhea.

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Indication of any immediate medical attention and special treatment needed:

If seeking medical attention, provide SDS document to physician. Physician should treat symptomatically.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing agents:

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition.

Unsuitable extinguishing agents: None

Special hazards arising from the substance or mixture:

Combustion products may include carbon oxides or other toxic vapors. Thermal decomposition can lead to release of irritating gases and vapors. Carbon oxides, sodium oxides, and nitrogen oxides. May form combustible (explosive) dust-air mixtures (during processing).

Advice for firefighters:

Protective equipment:

Use NIOSH-approved respiratory protection/breathing apparatus. Wear special protective clothing and positive pressure self-contained breathing apparatus. Butyl rubber, natural rubber, Neoprene, nitrile rubber, polyethylene, polyvinyl chloride, Teflon, Viton, or Saranex barrier recommended. (solid). (solid).

Additional information (precautions):

Move product containers away from fire or keep cool with water spray as a protective measure, where feasible. Use spark-proof tools and explosion-proof equipment. Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. Avoid inhaling gases, fumes, dust, mist, vapor and aerosols. Avoid contact with skin, eyes and clothing.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Wear protective equipment. Use spark-proof tools and explosion-proof equipment. Ensure that air-handling systems are operational. Ensure adequate ventilation. Refer to Section 8 for Personal Protective Equipment Information.

Environmental precautions:

Prevent from reaching drains, sewer or waterway. Collect contaminated soil for characterization per Section 13. Should not be released into environment.

Methods and material for containment and cleaning up:

Stop or control the leak, if this can be done without undue risk. Prompt cleanup and removal are necessary. Shovel into suitable dry container. Control runoff and isolate discharged material for proper disposal. (Solid). Keep in suitable closed containers for disposal. Always obey local regulations. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Avoid dispersal of dust in the air. Collect solids in powder form using vacuum with HEPA filter. Evacuate personnel to safe areas. Keep water away from release.

Reference to other sections: None

SECTION 7: Handling and storage

Precautions for safe handling:

Minimize dust generation and accumulation. Follow good hygiene procedures when handling chemical materials. Refer to Section 8. Do not eat, drink, smoke, or use personal products when handling chemical substances. Avoid contact with skin, eyes and clothing. May form combustible (explosive) dust-air mixtures (during processing).

Conditions for safe storage, including any incompatibilities:

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Store away from incompatible materials. Protect from freezing and physical damage. Keep away from food and beverages. Provide ventilation for containers. Store in cool, dry conditions in well sealed containers. Store with like hazards.

SECTION 8: Exposure controls/personal protection



Control parameters:

194491-31-1, EDTA tetrasodium salt, OSHA PEL TWA (Total Dust) 15 mg/m³ (50 mppcf*).
194491-31-1, EDTA tetrasodium salt, ACGIH TLV TWA (inhalable particles): 10 mg/m³.
1310-73-2, Sodium hydroxide, ACGIH 2 mg/m³ Ceiling.
1310-73-2, Sodium hydroxide, NIOSH 2 mg/m³ Ceiling.
1310-73-2, Sodium hydroxide, NIOSH 10 mg/m³ IDLH.
1310-73-2, Sodium hydroxide, OSHA PEL 2 mg/m³ TWA.

Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use/handling. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor or dusts (total/respirable) below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above. It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). Use under a fume hood.

Respiratory protection:

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator.For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Not required under normal conditions of use. 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. When necessary use NIOSH approved breathing equipment.

Protection of skin:

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. Select glove material impermeable and resistant to the substance. Select glove material based on rates of diffusion and degradation. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Use proper glove removal technique without touching outer surface. Avoid skin contact with used gloves. Wear protective clothing.

Eye protection:

Wear ANSI Z87 approved safety glasses with side shields or goggles.

General hygienic measures:

Perform routine housekeeping. Wash hands before breaks and at the end of work. Avoid contact with skin, eyes and clothing. Before re-wearing, wash contaminated clothing.

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SECTION 9: Physical and chemical properties

Appearance (physical state, color):	Clear, slightly yellow liquid	**Explosion limit lower**: **Explosion limit upper**:	Not determined Not determined
Odor:	Odorless	**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**:	Partly soluble in water.
Boiling point/Boiling range:	Not determined	**Partition coefficient (n-octanol/water)**:	Not determined
Flash point (closed cup):	Not determined	**Auto/Self-ignition temperature**:	Not determined
Evaporation rate:	Not determined	**Decomposition temperature**:	Not determined
Flammability (solid, gaseous):	Not determined	**Viscosity**:	a. Kinematic: Not determined b. Dynamic: Not determined
Density at 20°C:	Not determined		

SECTION 10: Stability and reactivity

Reactivity:

Nonreactive under normal conditions. Corrosive to metals.

Chemical stability:

Stable under recommended storage conditions.

Possible hazardous reactions:

None under normal processing.

Conditions to avoid:

Incompatible Materials. Avoid formation of dust.

Incompatible materials:

Oxidizing agents. Strong acids. Metals.

Hazardous decomposition products:

Other decomposition products - no data available. Oxides of carbon, nitrogen oxides.

SECTION 11: Toxicological information

Acute Toxicity:

Dermal:

LD50 Rabbit 1350 mg/kg 1310-73-2.

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

Severe eye irritant.

Respiratory or skin sensitization: No additional information.
Carcinogenicity:

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EDTA Tetrasodium Salt 194491-31-1: Not listed as a carcinogen (ACGIH, IARC, NTP)

Germ cell mutagenicity: No additional information.
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, EC50 72h 1.01 mg/l.
Fish (acute 1310-73-2): , 96 Hr LC50 Oncorhynchus mykiss: 45.4 mg/L [static].

Persistence and degradability:

Not Determined.

Bioaccumulative potential:

Not Determined.

Mobility in soil:

Not Determined.

Other adverse effects:

Not Determined.

SECTION 13: Disposal considerations

Waste disposal recommendations:

Product or containers must not be disposed with household garbage. 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. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262 11).

SECTION 14: Transport information

US DOT

UN Number:
ADR, ADN, DOT, IMDG, IATA — Not regulated

Limited Quantity Exception: — None

Bulk:
RQ (if applicable): None
Proper shipping Name: Not regulated.
Hazard Class: None
Packing Group: Not regulated.
Marine Pollutant (if applicable): No
Comments: None

Non Bulk:
RQ (if applicable): None
Proper shipping Name: Not regulated.
Hazard Class: None
Packing Group: Not regulated.
Marine Pollutant (if applicable): No
Comments: None

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SECTION 15: Regulatory information

United States (USA)

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

Acute,Reactive

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):

1310-73-2 Sodium Hydroxide 1000 lbs.

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 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: 3-0-1
HMIS: 3-0-1
GHS Full Text Phrases: None

Abbreviations and Acronyms:

IMDG International Maritime Code for Dangerous Goods.

PNEC. Predicted No-Effect Concentration (REACH).

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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).