according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 02.11.2015

Bromoform

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

Product name: Bromoform **Manufacturer/Supplier Article number**: BF1001

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:



Irritant

Acute toxicity (oral, dermal, inhalation), category 4 Skin irritation, category 2 Eye irritation, category 2A



Toxic

Acute toxicity (oral, dermal, inhalation), category 3



Environmentally Damaging

Chronic hazards to the aquatic environment, category 2

AcTox. Oral 4. AcTox. Inhal 3. Skin. Irrit 2. Eye. Irrit 2A. Aq. AcTox 2.

Aq. ChrTox. 2.

Signal word: Danger

Hazard statements:

Harmful if swallowed.

Causes skin irritation.

Causes serious eye irritation.

Toxic if inhaled.

Toxic to aquatic life with long lasting effects.

Precautionary statements:

If medical advice is needed have product container or label at hand.

Keep out of reach of children.

Read label before use.

Avoid breathing dust/fume/gas/mist/vapors/spray.

Wash skin thoroughly after handling.

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Do not eat, drink or smoke when using this product.

Use only outdoors or in a well-ventilated area.

Avoid release to the environment.

Wear protective gloves/protective clothing/eye protection/face protection.

Collect spillage.

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

Rinse mouth.

IF ON SKIN: Wash with soap and water.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Call a POISON CENTER or doctor/physician.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do.

Continue rinsing.

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists get medical advice/attention.

Take off contaminated clothing and wash before reuse.

Other Non-GHS Classification: None

SECTION 3: Composition/information on ingredients

Ingredients:

Ingredients:		
CAS 75-25-2	Bromoform	>95 %
CAS 64-17-5	Ethanol	0.5-4 %
		Percentages are by weight

SECTION 4: First aid measures

Description of first aid measures

After inhalation:

Seek medical assistance. Move exposed to fresh air. Give artificial respiration if necessary. If breathing is difficult give oxygen. Loosen clothing and place exposed in a comfortable position.

After skin contact:

Take victim immediately to hospital. Wash hands and exposed skin with soap and plenty of water.

After eye contact:

Seek medical assistance. Protect unexposed eye. Flush exposed eye gently using water for 15-20 minutes. Remove contact lenses, if present and easy to do, and continue rinsing.

After swallowing:

Seek medical assistance. Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed:

Irritation. Shortness of breath. Headache. Nausea. Dizziness. 64-17-5. 64-17-5: Stomach - Irregularities - Based on Human Evidence. Central nervous system depression, narcosis, damage to the heart. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Indication of any immediate medical attention and special treatment needed:

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

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SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing agents:

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

Unsuitable extinguishing agents: None

Special hazards arising from the substance or mixture:

Thermal decomposition can lead to release of irritating gases and vapors.

Advice for firefighters:

Protective equipment:

Wear protective eyeware, gloves, and clothing. Refer to Section 8.

Additional information (precautions):

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:

Ensure adequate ventilation. Ensure that air-handling systems are operational.

Environmental precautions:

Should not be released into environment. Prevent from reaching drains, sewer, or waterway.

Methods and material for containment and cleaning up:

Soak up with inert absorbent material and dispose of as hazardous waste. Wear protective eyeware, gloves, and clothing. Always obey local regulations. If necessary use trained response staff or contractor. Evacuate personnel to safe areas. Containerize for disposal. Refer to Section 13. Keep in suitable closed containers for disposal. Refer to Section 8.

Reference to other sections: None SECTION 7: Handling and storage

Precautions for safe handling:

Avoid contact with skin, eyes and clothing. Follow good hygiene procedures when handling chemical materials. Refer to Section 8. Follow proper disposal methods. Do not eat, drink, smoke, or use personal products when handling chemical substances. Refer to Section 13.

Conditions for safe storage, including any incompatibilities:

Store in a cool location. Keep away from food and beverages. Protect from freezing and physical damage. Provide ventilation for containers. Keep container tightly sealed. Store away from incompatible materials.

SECTION 8: Exposure controls/personal protection







Control parameters:

75-25-2, Bromoform, TWA 0.500000 ppm USA. ACGIH.

75-25-2, Bromoform, TWA 0.50 ppm 5.00 mg/m3 USA. NIOSH.

75-25-2, Bromoform, TWA 0.50 ppm 5.00 mg/m3 USA. OSHA.

64-17-5, Ethanol, TWA 1,000 ppm USA. ACGIH.

64-17-5, Ethanol, TWA 1,000 ppm 1,900 mg/m3 USA. OSHA.

64-17-5, Ethanol, TWA 1,000 ppm 1,900 mg/m3 USA. NIOSH.

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Appropriate engineering controls: Emergency eye wash fountains and safety showers should be available in

the immediate vicinity of use or handling. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational

Exposure Limits-OELs) indicated above.

Respiratory protection: 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: 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: Face shield and safety glasses are appropriate eye protection. Wear

equipment for eye protection tested and approved under appropriate

government standards such as NIOSH (US) or EN 166(EU).

General hygienic measures: Perform routine housekeeping. Wash hands before breaks and

immediately after handling the product. Avoid contact with skin, eyes and

clothing. Before re-wearing, wash contaminated clothing.

SECTION 9: Physical and chemical properties

Appearance (physical state, color):	light yellow liquid	Explosion limit lower: Explosion limit upper:	Not determined Not determined
Odor:	Chloroform - like	Vapor pressure at 20°C:	4.4 mm Hg @ 20C
Odor threshold:	Not determined	Vapor density:	8.7
pH-value:	Not determined	Relative density:	2.89 g/cm3 at 25 °C
Melting/Freezing point:	5 - 8 °C	Solubilities:	Soluble in water: 3.1 g/L; Molecular Weight: 252.73
Boiling point/Boiling range:	146 - 150 °C	Partition coefficient (noctanol/water):	Not determined
Flash point (closed cup):	INO OPIERMINEO	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.

Chemical stability:

Stable under normal conditions.

Possible hazardous reactions:

None under normal processing.

Conditions to avoid:

according to 29CFR1910/1200 and GHS Rev. 3

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Incompatible materials.

Incompatible materials:

Alkali metals.

Hazardous decomposition products:

Carbon oxides, Hydrogen bromide gas.

SECTION 11: Toxicological information

Acute Toxicity: No additional information. **Chronic Toxicity**: No additional information.

Skin corrosion/irritation: No additional information.

Serious eye damage/irritation: No additional information.

Respiratory or skin sensitization: No additional information.

Carcinogenicity: No additional information.

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:

75-25-2, LC50 - other fish - 7 mg/l - 96.0 h.

75-25-2, NOEC - Cyprinodon variegatus (sheepshead minnow) - 2.9 mg/l - 96.0 h.

75-25-2, LC50 - Cyprinodon variegatus (sheepshead minnow) - 7.1 mg/l - 96.0 h.

75-25-2, LC50 - Daphnia magna (Water flea) - 46 mg/l - 48 h.

Persistence and degradability: No additional information. **Bioaccumulative potential**: No additional information.

Mobility in soil: No additional information.

Other adverse effects:

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life with long lasting effects.

SECTION 13: Disposal considerations

Waste disposal recommendations:

Contact a licensed professional waste disposal service to dispose of this material. Dispose of empty containers as unused product. Product or containers must not be disposed together with household garbage. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). 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. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

SECTION 14: Transport information

US DOT

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 02.11.2015

Bromoform

UN Number:

ADR, ADN, DOT, IMDG, IATA 2515

Limited Quantity Exception: None

Bulk: Non Bulk:

RQ (if applicable): None RQ (if applicable): None

Proper shipping Name: Bromoform. **Proper shipping Name:** Bromoform.

Hazard Class: 6
Packing Group: |||.
Packing Group: |||.

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):

None of the ingredients are listed.

SARA Section 313 (Specific toxic chemical listings):

75-25-2 Bromoform.

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):

75-25-2 Bromoform 100 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.

according to 29CFR1910/1200 and GHS Rev. 3

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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: 2-0-0 **HMIS**: 2-0-0

GHS Full Text Phrases: None

Abbreviations and Acronyms: None