

# Safety Data Sheet

According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 11.27.2017

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**Chloroform**

## SECTION 1: Identification

### Product identifier

**Product name:** Chloroform

**Product code:** S25248

### Recommended use of the product and restriction on use

**Relevant identified uses:** Not determined or not applicable.

**Uses advised against:** Not determined or not applicable.

**Reasons why uses advised against:** Not determined or not applicable.

### Manufacturer or supplier details

**Manufacturer:**

AquaPhoenix Scientific  
860 Gitts Run Road  
Hanover  
PA 17331  
(717) 632-1291

**Supplier:**

Fisher Science Education  
6771 Silver Crest Road  
Nazareth  
PA 18064  
800 955-1177

### Emergency telephone number:

**United States**

Emergency Telephone No.: 800-255-3924

## SECTION 2: Hazard identification

### GHS classification:

Acute toxicity (oral), category 4

Acute toxicity (inhalation), category 4

Skin irritation, category 2

Eye irritation, category 2A

Carcinogenicity, category 2

Reproductive toxicity, category 2

Specific target organ toxicity - repeated exposure, category 1

### Label elements

**Hazard pictograms:**



**Signal word:** Danger

### Hazard statements:

H302 Harmful if swallowed

H332 Harmful if inhaled

H315 Causes skin irritation

H319 Causes serious eye irritation

H351 Suspected of causing cancer

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H361 Suspected of damaging fertility or the unborn child

H372 Causes damage to organs through prolonged or repeated exposure

### Precautionary statements:

P264 Wash skin thoroughly after handling

P270 Do not eat, drink or smoke when using this product

P271 Use only outdoors or in a well-ventilated area

P280 Wear protective gloves/protective clothing/eye protection/face protection

P201 Obtain special instructions before use

P202 Do not handle until all safety precautions have been read and understood

P260 Do not breathe dust/fume/gas/mist/vapors/spray

P301+P330+P312 IF SWALLOWED: Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell.

P304+P340+P312 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 you feel unwell

P321 Specific treatment (see supplemental first aid instructions on this label).

P362 Take off contaminated clothing and wash before reuse

P302+P352 If on skin: Wash with soap and water

P332+P313 If skin irritation occurs: Get medical advice/attention

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing

P308+P313 If exposed or concerned: Get medical advice/attention

P405 Store locked up

P501 Dispose of contents and container as instructed in Section 13

**Hazards not otherwise classified:** None

## SECTION 3: Composition/information on ingredients

Identification	Name	Weight %
CAS number: 67-66-3	Chloroform	100

**Additional Information:** None

## SECTION 4: First-aid measures

### Description of first-aid measures

#### General notes:

Not determined or not available.

#### After inhalation:

Loosen clothing as necessary and position individual in a comfortable position

Maintain an unobstructed airway

Get medical advice/attention if you feel unwell

Move to fresh air

Call a POISON CONTROL CENTER or seek medical attention if you feel unwell

#### After skin contact:

Rinse affected area with soap and water

If symptoms develop or persist, seek medical attention

Wash affected area with soap and water

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Seek medical attention if symptoms develop or persist

### After eye contact:

Rinse/flush exposed eye(s) gently using water for 15-20 minutes

Remove contact lenses, if present and easy to do

Continue rinsing

Get medical advice/attention

Remove contact lens(es) if able to do so during rinsing

Seek medical attention if irritation persists or if concerned

### After ingestion:

Rinse mouth and then drink plenty of water

Do not induce vomiting

Get medical advice/attention if you feel unwell

Call a POISON CONTROL CENTER or seek medical attention if you feel unwell

### Most important symptoms and effects, both acute and delayed

#### Acute symptoms and effects:

Not determined or not available.

#### Delayed symptoms and effects:

Not determined or not available.

### Immediate medical attention and special treatment

#### Specific treatment:

Not determined or not available.

#### Notes for the doctor:

Not determined or not available.

## SECTION 5: Fire-fighting measures

### Extinguishing media

#### Suitable extinguishing media:

Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition

#### Unsuitable extinguishing media:

Not determined or not applicable.

### Specific hazards during fire-fighting:

Thermal decomposition can lead to release of irritating gases and vapors

### Special protective equipment for firefighters:

Wear protective eye wear, gloves and clothing

Refer to Section 8

Use typical firefighting equipment, self-contained breathing apparatus, special tightly sealed suit

### Special precautions:

Heating causes a rise in pressure, risk of bursting and combustion

Shut off sources of ignition

Carbon monoxide and carbon dioxide may form upon combustion

## SECTION 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation

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Ensure air handling systems are operational  
Wear protective eye wear, gloves and clothing

### Environmental precautions:

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

### Methods and material for containment and cleaning up:

Absorb with non-combustible liquid-binding material (sand, diatomaceous earth (clay), acid binders, universal binders)  
Dispose of contents / container in accordance with local regulations

### Reference to other sections:

Not determined or not applicable.

## SECTION 7: Handling and storage

### Precautions for safe handling:

Do not eat, drink, smoke or use personal products when handling chemical substances.  
Avoid breathing mist or vapor.  
Use only with adequate ventilation.

### Conditions for safe storage, including any incompatibilities:

Store in a cool, well-ventilated area.  
Store away from foodstuffs.

## SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

### Occupational Exposure limit values:

Country (Legal Basis)	Substance	Identifier	Permissible concentration
United States (OSHA)	Chloroform	67-66-3	OSHA PEL Ceiling 240 mg/m <sup>3</sup> (50 ppm)
ACGIH	Chloroform	67-66-3	ACGIH TLV TWA 10 ppm
NIOSH	Chloroform	67-66-3	NIOSH REL Ca ST 9.78 mg/m <sup>3</sup> (2 ppm) [60 min]

### Biological limit values:

No biological exposure limits noted for the ingredient(s).

### Information on monitoring procedures:

Not determined or not applicable.

### 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.

### Personal protection equipment

#### Eye and face protection:

Safety goggles or glasses, or appropriate eye protection.

#### Skin and body protection:

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Select glove material impermeable and resistant to the substance.

### Respiratory protection:

When necessary, use NIOSH-approved breathing equipment.

### General hygienic measures:

Wash hands before breaks and at the end of work.

Avoid contact with skin, eyes and clothing.

Perform routine housekeeping.

Wash contaminated clothing before reusing.

## SECTION 9: Physical and chemical properties

### Information on basic physical and chemical properties

<b>Appearance (physical state, color):</b>	Clear liquid
<b>Odor:</b>	Aromatic chloroform odor
<b>Odor threshold:</b>	Not determined or not available.
<b>pH-value:</b>	Not determined or not available.
<b>Melting/Freezing point:</b>	-63°C (-81.4°F)
<b>Boiling point/range:</b>	60.5 - 61.5°C (140.9 - 142.7°F)
<b>Flash point:</b>	Not determined or not available.
<b>Evaporation rate:</b>	11.6 (Butyl Acetate = 1.0)
<b>Flammability (solid, gaseous):</b>	Not determined or not available.
<b>Explosion limit upper:</b>	Not determined or not available.
<b>Explosion limit lower:</b>	Not determined or not available.
<b>Vapor pressure:</b>	213 mBar at 20 °C
<b>Vapor density:</b>	4.12 (Air = 1.0)
<b>Density:</b>	Not determined or not available.
<b>Relative density:</b>	1.480
<b>Solubilities:</b>	Slightly soluble in water.
<b>Partition coefficient (n-octanol/water):</b>	Not determined or not available.
<b>Auto/Self-ignition temperature:</b>	Not determined or not available.
<b>Decomposition temperature:</b>	290°C
<b>Dynamic viscosity:</b>	Not determined or not available.
<b>Kinematic viscosity:</b>	Not determined or not available.
<b>Explosive properties</b>	Not determined or not available.
<b>Oxidizing properties</b>	Not determined or not available.

### Other information

## SECTION 10: Stability and reactivity

### Reactivity:

Does not react under normal conditions of use and storage.

### Chemical stability:

Stable under normal conditions of use and storage.

### Possibility of hazardous reactions:

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None under normal conditions of use and storage.

### Conditions to avoid:

Incompatible materials. Excess heat.

### Incompatible materials:

Alkali metals, strong caustics and oxidizers.

### Hazardous decomposition products:

Oxides of sodium. Emits very toxic fumes of chlorine and phosgene gas.

## SECTION 11: Toxicological information

### Acute toxicity

**Assessment:** Harmful if swallowed Harmful if inhaled

**Product data:** No data available.

#### Substance data:

Name	Route	Result
Chloroform	oral	LD50 - Rat - 695 mg/kg

### Skin corrosion/irritation

**Assessment:** Causes skin irritation

**Product data:** No data available.

#### Substance data:

Name	Result
Chloroform	Irritating to the skin.

### Serious eye damage/irritation

**Assessment:** Causes serious eye irritation

**Product data:** No data available.

#### Substance data:

Name	Result
Chloroform	Irritating effect on the eyes.

### Respiratory or skin sensitization

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

### Carcinogenicity

**Assessment:** Suspected of causing cancer

**Product data:** No data available.

#### Substance data:

Name	Species	Result
Chloroform		May cause cancer.

### International Agency for Research on Cancer (IARC):

Name	Classification
Chloroform	Group 2B - Possibly carcinogenic to humans

### National Toxicology Program (NTP):

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Name	Classification
Chloroform	Reasonably anticipated to be human carcinogens

### Germ cell mutagenicity

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

### Reproductive toxicity

**Assessment:** Suspected of damaging fertility or the unborn child

**Product data:** No data available.

**Substance data:**

Name	Result
Chloroform	Suspected of damaging fertility or the unborn child.

### Specific target organ toxicity (single exposure)

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:**

Name	Result
Chloroform	Suspected of affecting the kidneys/liver through prolonged or repeated exposure.

### Specific target organ toxicity (repeated exposure)

**Assessment:** Causes damage to organs through prolonged or repeated exposure

**Product data:** No data available.

**Substance data:** No data available.

### Aspiration toxicity

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

**Information on likely routes of exposure:** No data available.

**Symptoms related to the physical, chemical and toxicological characteristics:** No data available.

**Other information:** No data available.

## SECTION 12: Ecological information

### Acute (short-term) toxicity

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

### Chronic (long-term) toxicity

**Product data:** No data available.

**Substance data:** No data available.

### Persistence and degradability

**Product data:** No data available.

**Substance data:** No data available.

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## Chloroform

### Bioaccumulative potential

**Product data:** No data available.

**Substance data:** No data available.

### Mobility in soil

**Product data:**

log Pow: 2

**Substance data:** No data available.

### Other adverse effects:

Chloroform has moderate acute and chronic toxicity to aquatic life, especially brittle roots and chromosomal damage.


## SECTION 13: Disposal considerations

### Disposal methods:


Contact a licensed professional waste disposal service to dispose of this material. U.S. - RCRA (Resource Conservation & Recovery Act) - U Series Wastes - Acutely Toxic Wastes & Other Hazardous Characteristics waste number U044 (Chloroform). U.S. - RCRA (Resource Conservation & Recovery Act) - Basis for Listing - Appendix VII Included in waste streams: F024, F025, F039, K009, K010, K019, K020, K021, K029, K073, K116, K149, K150, K151, K158 (Chloroform). U.S. - RCRA (Resource Conservation & Recovery Act) - D Series Wastes - Max Conc of Contaminants for the Tox Characteristic 6.0 mg/L regulatory level (Chloroform). Dispose of empty containers as unused product. Product or containers must not be disposed 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

## SECTION 14: Transport information

### Canadian Transportation of Dangerous Goods (TDG)

UN number	UN1888
UN proper shipping name	Poisonous material, Chloroform.
UN transport hazard class(es)	6 
Packing group	III
Environmental hazards	None
Special precautions for user	None

### International Maritime Dangerous Goods (IMDG)

UN number	UN1888
UN proper shipping name	Poisonous material, Chloroform.
UN transport hazard class(es)	6 
Packing group	III
Environmental hazards	None
Special precautions for user	None



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### International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN number	UN1888
UN proper shipping name	Poisonous material, Chloroform.
UN transport hazard class(es)	6 
Packing group	III
Environmental hazards	None
Special precautions for user	None

## SECTION 15: Regulatory information

### Canada regulations

#### Domestic substances list (DSL):

67-66-3	Chloroform	Listed
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Non-domestic substances list (NDSL): Not determined.

## SECTION 16: Other information

Abbreviations and Acronyms: None

### Disclaimer:

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. 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-X

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End of Safety Data Sheet