SAFETY DATA SHEET

CHLOROFORM

SECTION 1:

CHEMICAL AND COMPANY IDENTIFICATION

BioShop Canada Inc. 5480 Mainway Burlington, Ontario L7L 6A4 1-800-234-1179

Emergency Telephone No.: 1-905-466-3832

Chemical Name: Chloroform Catalog Number: CCL402

SECTION 2

HAZARDS IDENTIFICATION

GHS Classification:

Acute toxicity, Oral (Category 4)

Acute toxicity, Inhalation (Category 3)

Skin irritation (Category 2)

Eye irritation (Category 2A)

Carcinogenicity (Category 2)

Reproductive toxicity (Category 2)

Specific target organ toxicity - single exposure (Category 3), Central nervous

Specific target organ toxicity - repeated exposure (Category 1), Liver, Kidney, Acute aquatic toxicity (Category 3

Pictogram





Signal word

DANGER

Hazard statement(s)

H302 Harmful if swallowed.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H331 Toxic if inhaled.

H336 May cause drowsiness or dizziness.

H351 Suspected of causing cancer..

H361 Suspected of damaging fertility or the unborn child.

H372 Causes damage to organs (Liver, Kidney) through prolonged or repeated exposure.

Precautionary statement(s)

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/ vapours/ spray.

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.

P273 Avoid release to the environment.

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

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

Rinse mouth.

P302 + P352 IF ON SKIN: Wash with plenty of water.

P304 + P340 + P311 IF INHALED: Remove person to fresh air and keep comfortable for

breathing. Call a POISON CENTER/doctor.

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.
P332 + P313 If skin irritation occurs: Get medical advice/ attention.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

Potential Health Effects Effects of Acute Exposure:

Routes of entry: Eyes, skin, inhalation, Ingestion.

Target Organs: Central Nervous System, kidneys, blood, G.I. tract

Eyes: Causes eye irritation. Causes burning and reddening. Skin: Causes skin irritation.. Absorbed through skin. Allergic reactions

possible.

Ingestion: May be fatal if swallowed. Causes nausea, vomiting and diarrhea. Inhalation: High concentrations may cause CNS effects. May cause dizziness, unconsciousness and coma. Large amounts may cause respiratory paralysis and death.

CHRONIC HEALTH HAZARDS; Possible cancer risk. May cause dermatitis. May cause reproductive effects. Prolonged exposure may cause liver, kidney and heart damage.

SECTION 3 COMPOSITION/ INGREDIENTS

CAS#

% >99.8

Chloroform: 67-66-3

Molecular Formula: CHCl3 Molecular Weight: 119.36

SECTION 4 FIRST AID MEASURES

Eyes: Immediately flush with plenty of water for at least 15 minutes. GET MEDICAL ATTENTION

Skin: Immediately flush area with soap and water. Get medical attention if irritation persists.

Inhalation: Get medical aid immediately. Remove from exposure to fresh air. If not breathing give artificial respiration.if breathing is difficult, give oxygen. **Ingestion**: Do not induce vomiting. If victim is conscious and alert, give 2-4

cupfuls of milk or water. GET MEDICAL ATTENTION

SECTION 5 FIRE FIGHTING MEASURES

Flammable: No Flash Point: N/A

 $\textbf{Autoignition Temperature:}\ \ N/A$

Extinguishing Media: Use, foam, dry chemical or carbon dioxide.

Explosion Data: N/A

SECTION 6

ACCIDENTAL RELEASE MEASURES

Ventilate the area. Wear appropriate protective equipment. Sweep and place in a closed container. In the event of a fire always wear self-contained breathing apparatus, NIOSH/MSHA approved or equivalent.

Leak and Spill Procedures: Ventilate the area. Wear appropriate protective equipment. Cover with dry lime or soda. Sweep and place in a closed container

SAFETY DATA SHEET

CHLOROFORM

SECTION 7 HANDLING AND STORAGE

Handling: Avoid contact. Do not get in eyes, on skin, or clothing. Wash thoroughly after handling. Wash contaminated clothing before reuse. Minimize spilling. Vapors can be hazardous.

Storage Conditions: Room temperature. Keep away from ignition sources and from heat. Keep in well ventilated area. Store in tight containers.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits:

Exposure Limits:

ACGIH: 10 ppm, OSHA C50 ppm; C240 mg/m3 NIOSH: 250 ppm TWA, 10 mg/m3 TWA OSHA: 1000 ppm TWA, 10 mg/m3 TWA

Use adequate ventilation. Ventilltion fans must be non-sparking. Wear appropriate protective equipment to prevent eye and skin exposure.

Wear appropriate respirator to prevent lung irritation.

Personal Protection: Lab coat, safety goggles, rubber gloves. **Ventilation**: Local exhaust systems. Use fume hood

Respiratory protection: use OSHA/MSHA approved respirator.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid

Appearance and Odor: Clear/colorless, ethereal odor

Freezing/Melting Point: 98C Autoignition temp.: N/A Viscocity: 0.58 mPas Boiling Point: 60.5-61.5° C Freezing: -63° C

Specific Gravity: 1.492 Vapor pressure: 160 mbar Vapor Density: 4.12 g/cm3 Water Solubility: slightly soluble

pH: N/A Flash point: N/A

SECTION 10 STABILITY AND REACTIVITY:

Stability: Stable under normal room temperature and pressures. **Conditions to avoid:** high temperatures, ignition sources.

In compatibility:

Danger of explosion with: Alkali metals, Alkaline earth metals, peroxide compounds, Fluorine. alcoholates, strong alkalis, Sodium hydroxide, Methanol, alkali hydroxides, Alcohols, organic nitro compounds, alkali amides, Oxygen,

bases, nitrogen oxides, Amines, Ammonia, Iron, in powder form, Aluminium, magnesium, metal alloys, sensitive to shock

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, acrid smoke and fumes.

Hazardous Polymerization: Has not been reported.

SECTION 11 TOXICOLOGICAL PROPERTIES

Exposure Limits:

Inhalation, rat: no data

LOEC- Dermal rabbit:3980mg/kg Oral, rat: LD50: **695 mg/kg Epidemiology:** data available **Teratogenicity**; data available

Reproductive Effects: suspected of damaging unborn child

Neurotoxicity: No data available **Mutagenicity:** No data available

Carcinogenicity: listed by ACGIH, IARC, IOSH, NTP or OSHA

SECTION 12 ECOLOGICAL INFORMATION

No data available

SECTION 13 DISPOSAL CONSIDERATION

Waste Disposal:.. Observe all Federal, provincial and local regulations.

SECTION 14 TRANSPORT INFORMATION

Shipping Information:

TDG (Canada)

UN number: 1888 Class: 6.1 Packing group: III Proper shipping name: CHLOROFORM

IMDG

UN number: 1888 Class: 6.1 Packing group: III EMS-No: F-A, S-A

Proper shipping name: CHLOROFORM

IATA

UN number: 1888 Class: 6.1 Packing group: III

Proper shipping name: Chloroform

SECTION 15 REGULATORY INFORMATION

US: TSCA: listed

European/International: N/A

Canada:

Listed on the Canadian Ingredient Disclosure List

SECTION 16 ADDITIONAL INFORMATION

Hazard Rating System (estimated)

NFPA Health Fire Reactivity 3 0 0

Prepared By: M.Kierdelewicz (President)

Date Prepared: Dec 29/2021 Phone: (800) 234-1179

The information provided on this Material Safety Data Sheet is furnished in good faith and without warranty of any kind. The above information is believed to be correct and should be used only as a guide. BioShop Canada Inc. shall not be held liable for any damage resulting from the handling or from the contact with the above product.

Observe all federal, provincial and state laws concerning health, safety and pollution.