### Chloroform



### Section 1

## **Product Description**

Product Name: Chloroform

Recommended Use: Science education applications

Synonyms: Methyl Trichloride

**Distributor:** Carolina Biological Supply Company

2700 York Road, Burlington, NC 27215

1-800-227-1150

Chemical Information: 800-227-1150 (8am-5pm (ET) M-F)

Chemtrec: 800-424-9300 (Transportation Spill Response 24 hours)

#### Section 2

### **Hazard Identification**

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

## **DANGER**







Toxic if swallowed or if inhaled. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May cause cancer. Suspected of damaging fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure. Harmful to aquatic life.

#### **GHS Classification:**

Carcinogenicity Category 1B, Skin Corrosion/Irritation Category 2, Serious Eye Damage/Eye Irritation Category 2A, Reproductive Toxicity Category 2, Specific Target Organ Systemic Toxicity (STOT) - Repeated Exposure Category 2, Acute Toxicity - Inhalation Vapor Category 3, Acute Toxicity - Oral Category 3, Specific Target Organ Systemic Toxicity (STOT) - Single Exposure Category 3, Hazardous to the aquatic environment - Acute Category 3

Other Safety Precautions: IF exposed or concerned: Get medical advice/attention.

Acute Toxicity Dermal Contains 100 % of the mixture consists of ingredient(s) of unknown toxicity

#### Section 3

# **Composition / Information on Ingredients**

 Chemical Name
 CAS #
 %

 Ethyl Alcohol
 64-17-5
 1

 Chloroform
 67-66-3
 99

#### **Section 4**

### First Aid Measures

**Emergency and First Aid Procedures** 

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

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

to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

**Skin Contact:** IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.

Take off contaminated clothing and wash before reuse.

Ingestion: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

### Section 5

# Firefighting Procedures

**Extinguishing Media:** Use dry chemical, CO2 or appropriate foam.

Fire Fighting Methods and Protection: Firefighters should wear full protective equipment and NIOSH approved self-contained

breathing apparatus.

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Fire and/or Explosion Hazards: Hazardous Combustion Products:

Fire or excessive heat may produce hazardous decomposition products. Carbon dioxide, Carbon monoxide, Hydrogen chloride

### Section 6

## **Spill or Leak Procedures**

Steps to Take in Case Material Is Released or Spilled:

Exposure to the spilled material may be severely irritating or toxic. Follow personal protective equipment recommendations found in Section 8 of this SDS. Personal protective equipment needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the expertise of employees in the area responding to the spill. Never exceed any occupational exposure limits. Clean up spills immediately using Protective Equipment recommended in Section 8 at a minimum. Ventilate the contaminated area. Isolate area. Keep unnecessary personnel away.

Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation. Use an inert absorbent such as sand or vermiculite. Place in properly labeled closed container. Isolate hazard area. Keep unnecessary and unprotected personnel from entering.

### Section 7

## **Handling and Storage**

Handling: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

Do not breathe dust/fume/gas/mist/vapors/spray. Avoid breathing dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Do no 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. Use personal protective equipment as required. Avoid direct sunlight and heat. Avoid creating and

inhaling spray or mist.

Storage: Store in a well-ventilated place. Keep container tightly closed. Store locked up. Suitable for any general chemical

storage.

Keep locked up and out of the reach of children. Blue - Toxic. Store separately in a secured area.

Storage Code: Blue - 7

### **Protection Information**

ACGIH OSHA PEL (STEL) (TWA) (STE

 Chemical Name
 (TWA)
 (STEL)
 (TWA)
 (STEL)

 Ethyl Alcohol
 10 ppm TWA
 N/A
 N/A
 N/A

**Control Parameters** 

Section 8

Engineering Measures: Local exhaust ventilation or other engineering controls are normally required when

handling or using this product to avoid overexposure.

**Personal Protective Equipment (PPE):** Lab coat, apron, eye wash, safety shower.

Respiratory Protection: No respiratory protection required under normal conditions of use. Wear a NIOSH

approved respirator if any exposure is possible.

approved respirator if any exposure is possible.

**Respirator Type(s):** NIOSH approved air purifying respirator with dust/mist filter.

**Eye Protection:** Wear chemical splash goggles when handling this product. Have an eye wash station

available.

**Skin Protection:** Avoid skin contact by wearing chemically resistant gloves, an apron and other protective

equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work. Use impervious gloves. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work. Where use can result in skin contact, practice good personal hygiene. Inspect gloves for chemical break-through and

replace at regular intervals. Clean protective equipment regularly.

Impervious rubber

Gloves:

## Section 9

## **Physical Data**

Formula: CHCl3

Molecular Weight: 119.39
Appearance: Colorless Liquid

Odor: Mild Sweet

Odor Threshold: 276 ppm OT (Dravnieks); 1350 mg/m3 OT

Vapor Pressure: 160 mmHg at 20 °C Evaporation Rate (BuAc=1): 11.6 Vapor Density (Air=1): 4.13 Specific Gravity: 1.472

Solubility in Water: Slightly Soluble

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(Dravnieks); 133 ppm OT (Punter); 650 mg/m3 OT (Punter)

pH: No data available

Melting Point: No data available -64 C Boiling Point: No data available 61 - 61 C

Flash Point: No data available Flammable Limits in Air: N/A

Log Pow (calculated): 2 at 25 °C

Autoignition Temperature: No data available **Decomposition Temperature:** No data available

Viscosity: No data available Percent Volatile by Volume: 100%

Reactivity Data

## Section 10

Reactivity: No data available

Chemical Stability: Stable under normal conditions.

Conditions to Avoid: None known.

**Incompatible Materials:** Lithium, Strong oxidizing agents, Magnesium, Caustics (bases)

**Hazardous Decomposition Products:** Hydrogen chloride, Carbon dioxide, Carbon monoxide, Sodium Oxides, Sodium,

**Hazardous Polymerization:** 

## Section 11

### Toxicity Data

Inhalation, Ingestion, and Skin contact. Routes of Entry

Symptoms (Acute): Liver disorders, Impaired Kidney Function, Cardiovascular system, Pregnancy,, Alcoholism,

**Delayed Effects:** No data available

**Acute Toxicity:** 

**Chemical Name CAS Number** Oral LD50 **Dermal LD50** Inhalation LC50 Ethyl Alcohol 64-17-5 Oral LD50 Not determined **INHALATION** 67-66-3 **GUINEA PIG 820** LC50 Rat 6000 MG/M3

mg/kg Oral LD50 Rat 300

mg/kg

Carcinogenicity:

**Chemical Name CAS Number IARC** NTP **OSHA** 

Ethyl Alcohol 64-17-5 Listed Listed Listed

67-66-3

**Chronic Effects:** 

Mutagenicity: No evidence of a mutagenic effect.

Teratogenicity: Evidence of a teratogenic effect (birth defect).

Sensitization: No evidence of a sensitization effect. Reproductive: Evidence of negative reproductive effects.

**Target Organ Effects:** 

Acute: See Section 2

Mutation data cited., Reproductive data cited., Tumorigenic data cited., Tests on laboratory animals **Chronic:** 

indicate material may produce adverse mutagenic and reproductive effects., Certain components or

species of this product are considered potential carcinogens.

#### Section 12

## **Ecological Data**

Overview: Moderate ecological hazard. This product may be dangerous to plants and/or wildlife. Highly/very

toxic to fish and other water organisms.

Mobility: No data Persistence: No data Bioaccumulation: No data Degradability: No data Other Adverse Effects: No data

**Chemical Name CAS Number Eco Toxicity** 

Ethyl Alcohol 64-17-5 96 HR LC50 POECILIA RETICULATA 300 MG/L [STATIC]

> 67-66-3 48 HR EC50 DAPHNIA MAGNA 29 MG/L

> > 48 HR EC50 DESMODESMUS SUBSPICATUS 560 MG/L

### Section 13

## Disposal Information

Dispose in accordance with all applicable Federal, State and Local regulations. Always **Disposal Methods:** contact a permitted waste disposer (TSD) to assure compliance.

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Waste Disposal Code(s): Not Determined

### **Section 14**

### **Transport Information**

**Ground - DOT Proper Shipping Name:** 

**Air - IATA Proper Shipping Name:** 

UN1888, Chloroform, 6.1, III \*\*\*4 L bottle is a reportable quantity.\*\*\*

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

name: Chloroform

Section 15

### **Regulatory Information**

TSCA Status: All components in this product are on the TSCA Inventory.

**Chemical Name** CAS § 313 Name § 304 RQ **CERCLA RQ** § 302 TPQ **CAA 112(2)** TQ Number Ethyl Alcohol 64-17-5 Chloroform 10 lb RQ 10 lb final RQ: 10000 lb No 67-66-3 4.54 kg final **TPQ** RQ

California Prop 65: WARNING: This product contains a chemical known to the state of California

to cause cancer, birth defects or other reproductive harm.

**Section 16** 

#### Additional Information

Revised: 09/09/2015 Replaces: 09/03/2014 Printed: 10-29-2015

The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

Glossary

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ecovery Act
Reauthorization Act
and health
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