

# **SAFETY DATA SHEET**

# SECTION 1) CHEMICAL PRODUCT AND SUPPLIER'S IDENTIFICATION

CAS Number:	98-56-6 (PCBTF)		
Product Name:	P-Chlorobenzotrifluoride (PCBTF)		
Revision Date:	Jul 04, 2017	Date Printed:	Sep 30, 2020
Version:	1.0	Supersedes Date:	N.A.
Manufacturer's Name:	Thames River Chemical Corp.		
Address:	5230 Harvester Road Burlington, ON, C	A, L7L 4X4	
Emergency Phone:	CHEMTREC (800) 424-9300		
Information Phone Numbe	r: 905-681-5353		
Fax:	905-681-5377		

Product/Recommended Uses: For laboratory or industrial use only.

# **SECTION 2) HAZARDS IDENTIFICATION**

# Classification

Acute aquatic toxicity - Category 2

Chronic aquatic toxicity - Category 2

Eye Irritation - Category 2A

Flammable Liquids - Category 3

Skin Irritation - Category 2

Skin Sensitizer - Category 1

Specific Target Organ Toxicity -Single Exposure (Respiratory Tract Irritation) - Category 3

# **Pictograms**



Signal Word

Warning

**Hazard Statements - Health** 

Causes serious eye irritation

Causes skin irritation

May cause an allergic skin reaction

May cause respiratory irritation

# **Hazard Statements - Physical**

Flammable liquid and vapor

# Hazard Statements - Environmental

Toxic to aquatic life with long lasting effects

**Precautionary Statements - General** 

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

Keep out of reach of children.

Read label before use.

#### **Precautionary Statements - Prevention**

Avoid release to the environment.

Wash/Wash hands thoroughly after handling.

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

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Keep container tightly closed.

Ground/bond container and receiving equipment.

Use explosion-proof electrical, ventilating, lighting equipment.

Use only non-sparking tools.

Take action to prevent static discharges.

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

Contaminated work clothing should not be allowed out of the workplace.

Use only outdoors or in a well-ventilated area.

# **Precautionary Statements - Response**

# Collect spillage.

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.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

In case of fire: Use carbon dixoxide, alcohol foam, water spray or dry chemical to extinguish.

IF ON SKIN: Wash with plenty of water and soap.

Specific treatment (see first-aid on the SDS).

Take off contaminated clothing. And wash it before reuse.

If skin irritation or a rash occurs: Get medical advice/attention.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Call a POISON CENTER or doctor, if you feel unwell.

#### **Precautionary Statements - Storage**

Store in a well-ventilated place. Keep cool.

Store locked up.

# **Precautionary Statements - Disposal**

Dispose of contents/container in accordance with local/national/international regulation. Waste management should be in full compliance with national, regional and local laws.

# **Physical Hazards Not Otherwise Classified**

No data available.

# **Health Hazards Not Otherwise Classified**

No data available.

SECTION 3) COMPOSITION/INFORMATION ON INGREDIENTS

CAS	Chemical Name	% By Weight
0000098-56-6	BENZENE-1-CHLORO-4(TRIFLUOROMETHYL)-	100% - 100%

Specific chemical identity and/or exact percentage (concentration) of the composition has been withheld to protect confidentiality or to reflect batch to batch variation.

# **SECTION 4) FIRST-AID MEASURES**

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

#### Causes skin irritation.

May cause an allergic skin reaction. Causes Serious eye irritation. May cause respiratory irritation.

#### May baddo

# Inhalation

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### **Eye Contact**

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

#### Skin Contact

Take off immediately all contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Rinse skin with water/shower and mild soap for 5 minutes or until product is removed.

#### Ingestion

Do not induce vomiting without medical advice. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Loosen tight clothing such as a collar, tie, belt or waistband. Do not use mouth to mouth method if victim ingested the substance. If victim is conscious and alert, give 2-4 cupful of milk or water. Seek immediate medical attention

#### Indication of Any Immediate Medical Attention and Special Treatment Needed

In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

# **SECTION 5) FIRE-FIGHTING MEASURES**

#### **Suitable Extinguishing Media**

Dry chemical, carbon dioxide, water spray, fog or foam

## **Unsuitable Extinguishing Media**

No data available.

# **Specific Hazards in Case of Fire**

Fire will produce irritating gases.

#### Fire-fighting Procedures

Isolate immediate hazard area and keep unauthorized personnel out. Move undamaged containers from immediate hazard area if it can be done safely. Stop spill/release if it can be done safely.

# **Special Protective Actions**

Wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear. Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible.

# SECTION 6) ACCIDENTAL RELEASE MEASURES

# **Emergency Procedure**

Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing. Ventilate closed spaces before entering. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). All equipment used when handling the product must be grounded. Evacuate and isolate hazard area and keep unauthorized personnel away.

#### **Recommended Equipment**

Wear chemical protective clothing and positive pressure self-contained breathing apparatus (SCBA).

#### **Personal Precautions**

Avoid breathing vapor or mist. Avoid contact with skin, eye or clothing.

#### **Environmental Precautions**

Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage

systems and natural waterways by using sand, earth, or other appropriate barriers.

#### Methods and Materials for Containment and Cleaning up

Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Use clean, non-sparking tools to collect absorbed material. Ventilate area after clean-up is complete.

# SECTION 7) HANDLING AND STORAGE

#### General

Wash hands after use. Do not get in eyes, on skin or on clothing. Use good personal hygiene practices. Eating, drinking and smoking in work areas is prohibited. Remove contaminated clothing and protective equipment before entering eating areas.

#### **Ventilation Requirements**

Use only with adequate ventilation to control air contaminants to their exposure limits. Report ventilation failures immediately. The use of local ventilation is recommended to control emissions near the source.

#### Storage Room Requirements

Store in dry, cool areas, out of direct sunlight and away from other sources of heat. Keep away from incompatible materials (e.g. oxidizers). Store flammable and combustible liquids in areas that are cool, dry and well ventilated to reduce vapour concentrations. Avoid storing in direct sunlight or near other heat sources; eliminate all sources of ignition.

# **SECTION 8) EXPOSURE CONTROLS/PERSONAL PROTECTION**

#### Eye protection

Wear safety glasses with side shields

Wear indirect-vent, impact and splash resistant goggles when working with liquids

#### **Skin Protection**

Use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### **Respiratory Protection**

If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker, a respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 should be followed. Check with respiratory protective equipment suppliers.

## **Appropriate Engineering Controls**

Showers, eyewash stations, and ventilation system.

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

Chemical Name	CANsmg	CANsppm	CANtmg	CANtppm	OSHA STEL (mg/m3)	OSHA STEL (ppm)	OSHA TWA (mg/m3)	OSHA TWA (ppm)
BENZENE-1- CHLORO-4 (TRIFLUOROM ETHYL)-							2.5	

Chemical	OSHA	OSHA Tables	OSHA Skin designation	ACGIH STEL	ACGIH STEL	ACGIH TWA	ACGIH TWA	ACGIH
Name	Carcinogen	(Z1, Z2, Z3)		(mg/m3)	(ppm)	(mg/m3)	(ppm)	TLV Basis
BENZENE-1- CHLORO-4 (TRIFLUOROM ETHYL)-		1				2.5		Bone dam; fluorosis

Chemical	ACGIH	ACGIH
Name	Carcinogen	Notations
BENZENE-1- CHLORO-4 (TRIFLUOROM ETHYL)-	A4	A4; BEI

A4 - Not Classifiable as a Human Carcinogen, BEI - Substances for which there is a Biological Exposure Index or Indices, dam - Damage

# **SECTION 9) PHYSICAL AND CHEMICAL PROPERTIES**

# **Physical and Chemical Properties**

Density Specific Gravity	1.35 g/cm3 1.35
Appearance	Transparent liquid
Odor Description	fragrance
Odor Threshold	N/A
рН	N/A
Melting Point	-36 °C
Low Boiling Point	136 °C
High Boiling Point	138 °C
Flash Point	43 °C
Vapor Pressure	10.47 (25°C) inch water column
Vapor Density	1.353 g/cm3
Evaporation Rate	N/A
Upper Explosion Level	N/A
Lower Explosion Level	N/A
Water Solubility	Slightly soluble in water
Coefficient Water/Oil	N/A
Viscosity	N/A

# **SECTION 10) STABILITY AND REACTIVITY**

# Reactivity

No data available.

## Possibility of hazardous reactions

No data available.

# Stability

Stable under normal storage and handling conditions.

# **Conditions to Avoid**

Avoid direct sunlight. Avoid contact with nitrites, chlorides, anhydrides, strong oxidizing, cellulose nitrate and halogenated hydrocarbons.

Heat, flames and sparks. Extremes of temperature and direct sunlight.

No data available

# **Hazardous Reactions/Polymerization**

Can react violently with strong acids and strong oxidizers.

# **Incompatible Materials**

Strong oxidizing agents. Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point.

# **Hazardous Decomposition Products**

Hydrogen chloride, nitrogen oxides, carbon monoxide, carbon dioxide.

# **SECTION 11) TOXICOLOGICAL INFORMATION**

# Likely Route of Exposure

Inhalation, ingestion, skin absorption

### **Acute Toxicity**

CAS 98-56-6: LD50(Oral, rat): 5,546 mg/kg, LC50(Inhalation, rat): 33mg/l (4h), LD50(Dermal, rabbit):>3,300 mg/kg

**Aspiration Hazard** 

No data available.

Carcinogenicity

No data available.

#### Germ Cell Mutagenicity

No data available.

# **Reproductive Toxicity**

No data available.

#### **Respiratory/Skin Sensitization**

May cause an allergic skin reaction

### **Serious Eye Damage/Irritation**

Causes serious eye irritation

#### **Skin Corrosion/Irritation**

Causes skin irritation

#### Specific Target Organ Toxicity - Repeated Exposure

No data available.

## Specific Target Organ Toxicity - Single Exposure

May cause respiratory irritation

#### Likely Routes of Exposure

Inhalation, Ingestion, Skin contact, Eye contact

## **Potential Health Effects - Miscellaneous**

0000098-56-6 BENZENE-1-CHLORO-4(TRIFLUOROMETHYL)-

Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: skin. Prolonged or repeated exposure may cause damage to any of the following organs/systems: kidneys, liver, thyroid. Potential skin sensitizer that may cause allergic reactions and contact dermatitis resulting in severe irritation, dryness, and cracking of the skin. Ingestion may cause any of the following: gastrointestinal irritation. Eye contact may cause any of the following: permanent eye injury. Inhalation may cause any of the following: stupor (central nervous system depression), respiratory tract irritation.

# **SECTION 12) ECOLOGICAL INFORMATION**

## **Toxicity**

Toxic to aquatic life with long lasting effects

#### **Mobility in Soil**

No data available.

**Bio-accumulative Potential** 

No data available.

**Persistence and Degradability** 

# No data available.

**Other Adverse Effects** 

No data available.

# **SECTION 13) DISPOSAL CONSIDERATIONS**

# Waste Disposal

Empty Containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes. It is the responsibility of the user of the product to determine at the time of disposal whether the product meets local criteria for hazardous waste. Waste management should be in full compliance with national, provincial and local laws.

# **SECTION 14) TRANSPORT INFORMATION**

	Transport Canada Information	U.S. DOT Information
UN number:	UN2234	UN2234
Proper shipping name:	Chlorobenzotrifluoride s	
Hazard class:	3	
Hazard class:		3
Packaging group:	Ш	Ш
Hazardous substance (RQ):		No Data Available
Marine Pollutant:	No Data Available	No Data Available
Note / Special Provision:	Note / Special Provision	No Data Available
Toxic-Inhalation Hazard:		No Data Available
Transport in bulk (according to Annex II of MARPOL 73/78):	No Data Available	

# **SECTION 15) REGULATORY INFORMATION**

CAS	Chemical Name	% By Weight	Regulation List
0000098-56-6	BENZENE-1-CHLORO-4 (TRIFLUOROMETHYL)-	100% - 100%	DSL,TSCA,CA_Prop65 - California Proposition 65,EU_EC_Inventory

# **SECTION 16) OTHER INFORMATION**

# Glossary

ACGIH- American Conference of Governmental Industrial Hygienists; ANSI- American National Standards Institute; Canadian TDG-Canadian Transportation of Dangerous Goods; CANsmg or CANsppm - Canadian Short Term Exposure Level in mg/L or in ppm; CANtmg or CANtppm - Canadian Time Weighted Average in mg/L or in ppm; CAS- Chemical Abstract Service; Chemtrec- Chemical Transportation Emergency Center(US); CHIP- Chemical Hazard Information and Packaging; DSL- Domestic Substances List; EC- Equivalent Concentration; EH40 (UK)- HSE Guidance Note EH40 Occupational Exposure Limits; EPCRA- Emergency Planning and Community Right-To-Know Act; ESL Effects screening levels; HMIS- Hazardous Material Information Service; LC- Lethal Concentration; LD- Lethal Dose; NFPA- National Fire Protection Association; OEL- Occupational Exposure Limits; OSHA- Occupational Safety and Health Administration, US Department of Labor; PEL- Permissible Exposure Limit; SARA (Title III)- Superfund Amendments and Reauthorization Act; SARA 313- Superfund Amendments and Reauthorization Act, Section 313; SCBA- Self Contained Breathing Apparatus; STEL-Short Term Exposure Limit; TCEQ Texas Commission on Environmental Quality; TLV- Threshold Limit Value; TSCA- Toxic Substances Control Act Public Law 94-469; TWA Time Weighted Value; US DOT- US Department of Transportation; WHMIS- Workplace Hazardous Materials Information System.

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