

# **SAFETY DATA SHEET**

Revision Date 27-March-2024 Revision Number 3

## 1. Identification

Product Name 1,2,3-Trichlorobenzene

Cat No. : L11144

**CAS-No** 87-61-6

**Synonyms** 1,2,6-Trichlorobenzene; Vic-trichlorobenzene

Recommended Use Laboratory chemicals.

**Uses advised against** Food, drug, pesticide or biocidal product use.

## Details of the supplier of the safety data sheet

#### Company

## Importer/Distributor

Fisher Scientific 112 Colonnade Road, Ottawa, ON K2E 7L6,

Canada

Tel: 1-800-234-7437

#### **Emergency Telephone Number**

For information **US** call: 001-800-227-6701 / **Europe** call: +32 14 57 52 11 Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99 **CHEMTREC** Tel. No. **US**:001-800-424-9300 / **Europe**:001-703-527-3887

## 2. Hazard(s) identification

Classification

WHMIS 2015 Classification Classified as hazardous under the Hazardous Products Regulations (SOR/2015-17)

Acute oral toxicity

Skin Corrosion/Irritation

Serious Eye Damage/Eye Irritation

Specific target organ toxicity (single exposure)

Category 2

Category 2

Category 3

Target Organs - Respiratory system.

Label Elements

## Signal Word

Warning

#### **Hazard Statements**

Harmful if swallowed Causes skin irritation

Causes serious eye irritation May cause respiratory irritation



#### **Precautionary Statements**

#### Prevention

Use only outdoors or in a well-ventilated area

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

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

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

#### Response

IF ON SKIN: Wash with plenty of soap and water

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

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

Call a POISON CENTER/ doctor if you feel unwell

Take off contaminated clothing and wash it before reuse

#### Storage

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

Store locked up

#### **Disposal**

Dispose of contents/container to an approved waste disposal plant

#### Other Hazards

Very toxic to aquatic life with long lasting effects

## 3. Composition/Information on Ingredients

Component	CAS-No	Weight %	
1,2,3-Trichlorobenzene	87-61-6	99	

## 4. First-aid measures

**Eye Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get

medical attention.

Skin Contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. Get medical attention.

Inhalation Remove from exposure, lie down. Remove to fresh air. If not breathing, give artificial

respiration. Get medical attention.

**Ingestion** Clean mouth with water. Get medical attention.

Most important symptoms/effects

Notes to Physician

No information available. Treat symptomatically

## 5. Fire-fighting measures

1,2,3-Trichlorobenzene Revision Date 27-March-2024

Suitable Extinguishing Media Water spray. Carbon dioxide (CO 2). Dry chemical. Chemical foam.

Unsuitable Extinguishing Media No information available

**Flash Point** 126 °C / 258.8 °F

Method - No information available

Autoignition Temperature 571 °C / 1059.8 °F

**Explosion Limits** 

**Upper** 6.60% **Lower** 2.50%

Sensitivity to Mechanical Impact No information available Sensitivity to Static Discharge No information available

#### Specific Hazards Arising from the Chemical

Do not allow run-off from fire-fighting to enter drains or water courses.

#### **Hazardous Combustion Products**

Carbon monoxide (CO). Carbon dioxide (CO2). Phosgene. Hydrogen chloride gas.

### **Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

HealthFlammabilityInstabilityPhysical hazards210N/A

## 6. Accidental release measures

Personal Precautions
Environmental Precautions

Ensure adequate ventilation. Use personal protective equipment as required. Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

**Methods for Containment and Clean** Sweep up and shovel into suitable containers for disposal. Do not let this chemical enter the environment.

## 7. Handling and storage

Handling

Avoid contact with skin and eyes. Do not breathe dust. Do not ingest. If swallowed then seek immediate medical assistance.

Storage.

Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Incompatible Materials. Strong oxidizing agents. Metals.

## 8. Exposure controls / personal protection

**Exposure Guidelines** 

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

#### **Engineering Measures**

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations

and safety showers are close to the workstation location.

Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control

hazardous materials at source

#### Personal protective equipment

**Eye Protection** Goggles

Hand Protection Protective gloves

Glo	ove material	Breakthrough time	Glove thickness	Glove comments
N	itrile rubber	See manufacturers	-	Splash protection only
	Neoprene	recommendations		
Na	tural rubber			
	PVC			

Inspect gloves before use. observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information) gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, gloves with care avoiding skin contamination.

#### **Respiratory Protection**

No protective equipment is needed under normal use conditions.

#### **Environmental exposure controls**

Prevent product from entering drains. Do not allow material to contaminate ground water system. Local authorities should be advised if significant spillages cannot be contained.

#### **Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and after work.

## 9. Physical and chemical properties

Physical State Solid
Appearance White
Odor aromatic

Odor Threshold<br/>pHNo information available<br/>No information available

Melting Point/Range 50 - 54 °C / 122 - 129.2 °F

**Boiling Point/Range**218 - 219 °C / 424.4 - 426.2 °F @ 760 mmHg

Flash Point 126 °C / 258.8 °F Evaporation Rate Not applicable

Flammability (solid, gas)

No information available

Flammability or explosive limits

 Upper
 6.60%

 Lower
 2.50%

Vapor Pressure0.07 mmHg @ 25 °CVapor DensityNot applicable

Specific GravityNo information availableSolubilityNo information availablePartition coefficient; n-octanol/waterNo data available

Partition coefficient; n-octanol/water

Autoignition Temperature

No data available

571 °C / 1059.8 °F

Decomposition Temperature

> 300°C

ViscosityNot applicableMolecular FormulaC6 H3 Cl3Molecular Weight181.45

## 10. Stability and reactivity

Reactive Hazard None known, based on information available

Stability Stable under normal conditions.

**Conditions to Avoid** Incompatible products.

**Incompatible Materials** Strong oxidizing agents, Metals

Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO2), Phosgene, Hydrogen chloride gas

**Hazardous Polymerization** Hazardous polymerization does not occur.

**Hazardous Reactions** None under normal processing.

## 11. Toxicological information

#### **Acute Toxicity**

## **Product Information**

**Component Information** 

1,2,3-Trichlorobenzene

Component	Component LD50 Oral		LC50 Inhalation	
1,2,3-Trichlorobenzene	1,2,3-Trichlorobenzene LD50 = 1830 mg/kg (Rat)		Not listed	

**Toxicologically Synergistic** 

**Products** 

No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation No information available

No information available Sensitization

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
1,2,3-Trichlorobenzen	87-61-6	Not listed				
е						

**Mutagenic Effects** No information available

**Reproductive Effects** No information available.

**Developmental Effects** No information available.

No information available. **Teratogenicity** 

STOT - single exposure Respiratory system

STOT - repeated exposure None known

No information available **Aspiration hazard** 

Symptoms / effects,both acute and No information available

delayed

**Endocrine Disruptor Information** No information available

Other Adverse Effects The toxicological properties have not been fully investigated.

# 12. Ecological information

#### **Ecotoxicity**

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. The product contains following substances which are hazardous for the environment.

Persistence and Degradability May persist

#### 1,2,3-Trichlorobenzene

#### Bioaccumulation/ Accumulation

No information available.

**Mobility** 

. Is not likely mobile in the environment due its low water solubility.

Component	log Pow
1,2,3-Trichlorobenzene	4.139

## 13. Disposal considerations

**Waste Disposal Methods** 

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 to ensure complete and accurate classification.

## 14. Transport information

DOT

UN-No UN2811
Hazard Class 6.1
Packing Group III

TDG

UN-No UN2811
Hazard Class 6.1
Packing Group III

IATA

UN-No UN2811

Proper Shipping Name TOXIC SOLID, ORGANIC, N.O.S.\*

Hazard Class 6.1 Packing Group III

IMDG/IMO

UN-No UN2811

**Proper Shipping Name** Toxic solid, organic, n.o.s.

Hazard Class 6.1 Packing Group III

# 15. Regulatory information

#### International Inventories

Component	CAS-No	DSL	NDSL	TSCA	TSCA Inventory notification - Active-Inactive	EINECS	ELINCS	NLP
1,2,3-Trichlorobenzene	87-61-6	Х	-	Х	ACTIVE	201-757-1	-	-

Component	CAS-No	IECSC	KECL	ENCS	ISHL	TCSI	AICS	NZIoC	PICCS
1,2,3-Trichlorobenzene	87-61-6	Х	99-3-1181	X	X	X	X	Х	Х

#### Legend:

X - Listed '-' - Not Listed

KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

IECSC - Chinese Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**ENCS** - Japanese Existing and New Chemical Substances

AICS - Australian Inventory of Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

#### Canada

SDS in compliance with provisions of information as set out in Canadian Standard - Part 4, Schedule 1 and 2 of the Hazardous Products Regulations (HPR) and meets the requirements of the HPR (Paragraph 13(1)(a) of the Hazardous Products Act (HPA)).

Component	Canada - National Pollutant Release Inventory (NPRI)	Canadian Environmental Protection Agency (CEPA) - List of Toxic Substances	Canada's Chemicals Management Plan (CEPA)
1,2,3-Trichlorobenzene	Part 4 Substance		

#### Other International Regulations

Authorisation/Restrictions according to EU REACH

Not applicable

### Safety, health and environmental regulations/legislation specific for the substance or mixture

Component	CAS-No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
1,2,3-Trichlorobenzene	87-61-6	Not applicable	Not applicable	Not applicable	Not applicable
Component	CAS-No	Seveso III Directive (2012/18/EC) - (2012/18/EC) - Qualifying Quantities for Major Accident Notification Requirements		Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
1,2,3-Trichlorobenzene	87-61-6	Not applicable	Not applicable	Not applicable	Annex I - Y45

## 16. Other information

Prepared By Product Safety Department

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www.thermofisher.com

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**Revision Summary** New emergency telephone response service provider.

## Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of SDS**