

SAFETY DATA SHEET

Creation Date 24-Nov-2010

Revision Date 14-Feb-2020

Revision Number 2

1. Identification

Product Name 2-Chlorotoluene

Cat No. : B23596

CAS-No 95-49-8
Synonyms 1-Chloro-2-methylbenzene; OCT

Recommended Use Laboratory chemicals.
Uses advised against Food, drug, pesticide or biocidal product use.
Details of the supplier of the safety data sheet

Company

Alfa Aesar
Thermo Fisher Scientific Chemicals, Inc.
30 Bond Street
Ward Hill, MA 01835-8099
Tel: 800-343-0660
Fax: 800-322-4757
Email: tech@alfa.com
www.alfa.com

Emergency Telephone Number

During normal business hours (Monday-Friday, 8am-7pm EST), call (800) 343-0660.
After normal business hours, call Carechem 24 at (866) 928-0789.

2. Hazard(s) identification

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

| | |
|------------------------------------|------------|
| Flammable liquids | Category 3 |
| Acute Inhalation Toxicity - Vapors | Category 4 |
| Reproductive Toxicity | Category 2 |

Label Elements

Signal Word

Warning

Hazard Statements

Flammable liquid and vapor
Harmful if inhaled
Suspected of damaging the unborn child

**Precautionary Statements****Prevention**

Obtain special instructions before use
 Do not handle until all safety precautions have been read and understood
 Use personal protective equipment as required
 Avoid breathing dust/fume/gas/mist/vapors/spray
 Use only outdoors or in a well-ventilated area
 Keep away from heat/sparks/open flames/hot surfaces. - 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 precautionary measures against static discharge

Response

IF exposed or concerned: Get medical attention/advice

Inhalation

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

Skin

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

Fire

In case of fire: Use CO₂, dry chemical, or foam for extinction

Storage

Store locked up
 Store in a well-ventilated place. Keep cool

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Very toxic to aquatic life with long lasting effects
 Toxic to aquatic life with long lasting effects

3. Composition/Information on Ingredients

| Component | CAS-No | Weight % |
|-----------------|---------|----------|
| o-Chlorotoluene | 95-49-8 | >95 |

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 breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention. |
| Ingestion | Clean mouth with water. Get medical attention. |
| Most important symptoms and | Difficulty in breathing. . Symptoms of overexposure may be headache, dizziness, tiredness, |

effects nausea and vomiting
Notes to Physician Treat symptomatically

5. Fire-fighting measures

Suitable Extinguishing Media Water spray. Carbon dioxide (CO₂). Dry chemical. Chemical foam. Water mist may be used to cool closed containers.

Unsuitable Extinguishing Media No information available

Flash Point 49 °C / 120 °F

Method - No information available

Autoignition Temperature 450 °C / 842 °F

Explosion Limits

Upper No data available
Lower No data available
Sensitivity to Mechanical Impact No information available
Sensitivity to Static Discharge No information available

Specific Hazards Arising from the Chemical

Flammable. Containers may explode when heated. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back.

Hazardous Combustion Products

Carbon monoxide (CO). Carbon dioxide (CO₂). 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

| Health | Flammability | Instability | Physical hazards |
|--------|--------------|-------------|------------------|
| 2 | 2 | 0 | N/A |

6. Accidental release measures

Personal Precautions Remove all sources of ignition. Take precautionary measures against static discharges.

Environmental Precautions Do not flush into surface water or sanitary sewer system.

Methods for Containment and Clean Up Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Do not let this chemical enter the environment.

7. Handling and storage

Handling Avoid contact with skin and eyes. Do not breathe mist/vapors/spray. Do not ingest. If swallowed then seek immediate medical assistance. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use spark-proof tools and explosion-proof equipment. Use only non-sparking tools. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges.

Storage Keep in a dry, cool and well-ventilated place. Refer product specification and/or product label for specific storage temperature requirement. Keep container tightly closed. Keep away from heat, sparks and flame. Flammables area. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed in a dry and well-ventilated place.

8. Exposure controls / personal protection

Exposure Guidelines

| Component | ACGIH TLV | OSHA PEL | NIOSH IDLH | Mexico OEL (TWA) |
|-----------------|-------------|---|--|--|
| o-Chlorotoluene | TWA: 50 ppm | (Vacated) TWA: 50 ppm (Vacated) TWA: 250 mg/m ³ | TWA: 50 ppm TWA: 250 mg/m ³ STEL: 75 ppm STEL: 375 mg/m ³ | TWA: 50 ppm TWA: 250 mg/m ³ STEL: 75 ppm STEL: 375 mg/m ³ |

Engineering Measures Use explosion-proof electrical/ventilating/lighting/equipment. Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

- Eye/face Protection** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
- Skin and body protection** Wear appropriate protective gloves and clothing to prevent skin exposure.
- Respiratory Protection** No protective equipment is needed under normal use conditions.
- Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

| | |
|---|--|
| Physical State | Liquid |
| Appearance | Colorless |
| Odor | aromatic |
| Odor Threshold | No information available |
| pH | No information available |
| Melting Point/Range | -36 °C / -32.8 °F |
| Boiling Point/Range | 157 - 159 °C / 314.6 - 318.2 °F @ 760 mmHg |
| Flash Point | 49 °C / 120 °F |
| Evaporation Rate | No information available |
| Flammability (solid,gas) | Not applicable |
| Flammability or explosive limits | |
| Upper | No data available |
| Lower | No data available |
| Vapor Pressure | 3.5 mbar @ 20 °C |
| Vapor Density | 4.38 |
| Specific Gravity | 1.080 |
| Solubility | Slightly soluble in water |
| Partition coefficient; n-octanol/water | No data available |
| Autoignition Temperature | 450 °C / 842 °F |
| Decomposition Temperature | No information available |
| Viscosity | No information available |
| Molecular Formula | C7 H7 Cl |
| Molecular Weight | 126.59 |

10. Stability and reactivity

- Reactive Hazard** None known, based on information available
- Stability** Stable under recommended storage conditions.
- Conditions to Avoid** Keep away from open flames, hot surfaces and sources of ignition. Incompatible products.

| | |
|---|--|
| Incompatible Materials | Strong oxidizing agents |
| Hazardous Decomposition Products | Carbon monoxide (CO), Carbon dioxide (CO ₂), Hydrogen chloride gas |
| Hazardous Polymerization | No information available. |
| Hazardous Reactions | None under normal processing. |

11. Toxicological information

Acute Toxicity

Product Information Component Information

| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|-----------------|--------------------|---------------------|-----------------|
| o-Chlorotoluene | 3227 mg/kg (Rat) | > 5000 g/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 |
| Sensitization | No information available |
| Carcinogenicity | The table below indicates whether each agency has listed any ingredient as a carcinogen. |

| Component | CAS-No | IARC | NTP | ACGIH | OSHA | Mexico |
|-----------------|---------|------------|------------|------------|------------|------------|
| o-Chlorotoluene | 95-49-8 | Not listed | Not listed | Not listed | Not listed | Not listed |

Mutagenic Effects No information available

Reproductive Effects No information available.

Developmental Effects No information available.

Teratogenicity No information available.

STOT - single exposure None known

STOT - repeated exposure None known

Aspiration hazard No information available

Symptoms / effects, both acute and delayed Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting

Endocrine Disruptor Information No information available

Other Adverse Effects See actual entry in RTECS for complete information.

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.

| Component | Freshwater Algae | Freshwater Fish | Microtox | Water Flea |
|-----------------|------------------|----------------------|--|----------------------|
| o-Chlorotoluene | Not listed | LC50 = 7.7 mg/L 96 h | EC50 = 2.90 mg/L 5 min EC50 = 3.33 mg/L 15 min EC50 = 4.70 mg/L 30 min | EC50 = 0.7 mg/L 48 h |

Persistence and Degradability May persist based on information available.

Bioaccumulation/ Accumulation No information available.

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

| Component | log Pow |
|-----------------|---------|
| o-Chlorotoluene | 3.42 |

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 UN2238
 Proper Shipping Name CHLOROTOLUENES
 Hazard Class 3
 Packing Group III

TDG

UN-No UN2238
 Proper Shipping Name CHLOROTOLUENES
 Hazard Class 3
 Packing Group III

IATA

UN-No UN2238
 Proper Shipping Name CHLOROTOLUENES
 Hazard Class 3
 Packing Group III

IMDG/IMO

UN-No UN2238
 Proper Shipping Name CHLOROTOLUENES
 Hazard Class 3
 Packing Group III

15. Regulatory information

United States of America Inventory

| Component | CAS-No | TSCA | TSCA Inventory notification - Active/Inactive | TSCA - EPA Regulatory Flags |
|-----------------|---------|------|---|-----------------------------|
| o-Chlorotoluene | 95-49-8 | X | ACTIVE | - |

Legend:

TSCA - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

TSCA 12(b) - Notices of Export Not applicable

International Inventories

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Australia (AICS), China (IECSC), Korea (ECL).

| Component | CAS-No | DSL | NDSL | EINECS | PICCS | ENCS | AICS | IECSC | KECL |
|-----------------|---------|-----|------|-----------|-------|------|------|-------|------|
| o-Chlorotoluene | 95-49-8 | X | - | 202-424-3 | X | X | X | X | X |

U.S. Federal Regulations

SARA 313 Not applicable

SARA 311/312 Hazard Categories See section 2 for more information

| | |
|---|---|
| CWA (Clean Water Act) | Not applicable |
| Clean Air Act | Not applicable |
| OSHA - Occupational Safety and Health Administration | Not applicable |
| CERCLA | Not applicable |
| California Proposition 65 | This product does not contain any Proposition 65 chemicals. |

U.S. State Right-to-Know Regulations

| Component | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|-----------------|---------------|------------|--------------|----------|--------------|
| o-Chlorotoluene | X | X | X | - | X |

U.S. Department of Transportation

| | |
|-----------------------------|---|
| Reportable Quantity (RQ): | N |
| DOT Marine Pollutant | N |
| DOT Severe Marine Pollutant | N |

U.S. Department of Homeland Security This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade No information available

16. Other information

| | |
|-------------------------|---|
| Prepared By | Health, Safety and Environmental Department Email: tech@alfa.com www.alfa.com |
| Creation Date | 24-Nov-2010 |
| Revision Date | 14-Feb-2020 |
| Print Date | 14-Feb-2020 |
| Revision Summary | SDS authoring systems update, replaces ChemGes SDS No. 95-49-8/2. |

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