

SAFETY DATA SHEET

Creation Date 26-Oct-2010

Revision Date 29-Mar-2024

Revision Number 3

1. Identification

Product Name 2-Chlorophenol

Cat No. : A10311

CAS No 95-57-8
Synonyms o-chlorophenol.; 0-chlorophenic acid; 2-hydroxychlorobenzene

Recommended Use Laboratory chemicals.
Uses advised against Food, drug, pesticide or biocidal product use.

Details of the supplier of the safety data sheet**Company**

Thermo Fisher Scientific Chemicals, Inc.
30 Bond Street
Ward Hill, MA 01835-8099
Tel: 800-343-0660
Fax: 800-322-4757

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**

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

| | |
|------------------------------------|------------|
| Flammable liquids | Category 4 |
| Acute oral toxicity | Category 2 |
| Acute dermal toxicity | Category 4 |
| Acute Inhalation Toxicity - Vapors | Category 4 |
| Skin Corrosion/Irritation | Category 2 |
| Serious Eye Damage/Eye Irritation | Category 1 |
| Skin Sensitization | Category 1 |

Label Elements**Signal Word**

Danger

Hazard Statements

Combustible liquid

Fatal if swallowed
Causes skin irritation
May cause an allergic skin reaction
Causes serious eye damage
Harmful in contact with skin or if inhaled



Precautionary Statements

Prevention

Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Wear protective gloves/protective clothing/eye protection/face protection
Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Contaminated work clothing should not be allowed out of the workplace
Keep away from heat/sparks/open flames/hot surfaces. - No smoking

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Call a POISON CENTER or doctor/physician if you feel unwell

Skin

IF ON SKIN: Wash with plenty of soap and water
Call a POISON CENTER or doctor/physician if you feel unwell
Take off contaminated clothing and wash before reuse
If skin irritation or rash occurs: Get medical advice/attention

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor/physician

Ingestion

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
Rinse mouth

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)

Toxic to aquatic life with long lasting effects

3. Composition/Information on Ingredients

| Component | CAS No | Weight % |
|----------------|---------|----------|
| 2-Chlorophenol | 95-57-8 | > 98 |

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 effects | Difficulty in breathing. . Causes burns by all exposure routes. May cause allergic skin reaction. Causes eye burns. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting: Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting: Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation: Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing |
| Notes to Physician | Treat symptomatically |

5. Fire-fighting measures

| | |
|---|--|
| Suitable Extinguishing Media | Water spray. Carbon dioxide (CO ₂). Dry chemical. Chemical foam. Water mist may be used to cool closed containers. |
| Unsuitable Extinguishing Media | No information available |
| Flash Point | 63 °C / 145.4 °F |
| Method - | No information available |
| Autoignition Temperature | 550 °C / 1022 °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

Combustible material. Flammable. Containers may explode when heated.

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
4

Flammability
3

Instability
0

Physical hazards
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. See Section 12 for additional Ecological Information. Avoid release to the environment. Collect spillage. |
| 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. Do not let this chemical enter the environment. Remove all sources of ignition. |

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 open flames, hot surfaces and sources of ignition. |
| Storage. | Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Keep away from heat, sparks and flame. Keep containers tightly closed in a dry, cool and well-ventilated place. Incompatible Materials. Strong oxidizing agents. Acid anhydrides. Acid chlorides. |

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. |
| 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 | Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. |
| Recommended Filter type: | Organic gases and vapours filter. Type A. Brown. conforming to EN14387. |
| Hygiene Measures | Handle in accordance with good industrial hygiene and safety practice. |

9. Physical and chemical properties

| | |
|---|-------------------------------|
| Physical State | Liquid |
| Appearance | Light yellow |
| Odor | pungent |
| Odor Threshold | No information available |
| pH | 2.0 Acidic |
| Melting Point/Range | 8 °C / 46.4 °F |
| Boiling Point/Range | 173 - 175 °C / 343.4 - 347 °F |
| Flash Point | 63 °C / 145.4 °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 | 1.3 mbar @ 12 °C |
| Vapor Density | No information available |
| Specific Gravity | 1.262 |
| Solubility | No information available |
| Partition coefficient; n-octanol/water | No data available |
| Autoignition Temperature | 550 °C / 1022 °F |
| Decomposition Temperature | > 550°C |
| Viscosity | 4.11 mPa.s at 25 °C |
| Molecular Formula | C6 H5 Cl O |

Molecular Weight

128.56

10. Stability and reactivity

| | |
|---|--|
| Reactive Hazard | None known, based on information available |
| Stability | Stable under normal conditions. |
| Conditions to Avoid | Incompatible products. Keep away from open flames, hot surfaces and sources of ignition. |
| Incompatible Materials | Strong oxidizing agents, Acid anhydrides, Acid chlorides |
| 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 |
|----------------|--------------------------|--------------------------------|------------------------------|
| 2-Chlorophenol | LD50 = 670 mg/kg (Rat) | LD50 1000 - 1580 mg/kg (Rat) | LC50 = 2.05 mg/L (Rat) 4 h |

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 |
|----------------|---------|------------|------------|------------|------------|------------|
| 2-Chlorophenol | 95-57-8 | Not listed | Not listed | Not listed | Not listed | Not listed |

Mutagenic Effects Not mutagenic in AMES Test

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: Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting: Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation: Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing

Endocrine Disruptor Information No information available

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

12. Ecological information

Ecotoxicity

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 |
|----------------|---|--|--|---|
| 2-Chlorophenol | EC50: = 70 mg/L, 96h (Selenastrum capricornutum) | LC50: 7.6 - 15.4 mg/L, 96h static (Oryzias latipes) LC50: = 13.8 mg/L, 96h semi-static (Poecilia reticulata) LC50: 17.68 - 23.64 mg/L, 96h static (Poecilia reticulata) LC50: 5.7 - 8.0 mg/L, 96h static (Lepomis macrochirus) LC50: 8.86 - 14.66 mg/L, 96h static (Pimephales promelas) LC50: 8.64 - 10.2 mg/L, 96h flow-through (Pimephales promelas) | EC50 = 18.1 mg/L 5 min EC50 = 21.1 mg/L 30 min EC50 = 6.8 mg/L 1 h | EC50: 3.31 - 4.91 mg/L, 48h Static (Daphnia magna) EC50: = 7.4 mg/L, 48h (Daphnia magna) |

Persistence and Degradability Soluble in water Persistence is unlikely based on information available.

Bioaccumulation/ Accumulation No information available.

Mobility . Will likely be mobile in the environment due to its water solubility.

| Component | log Pow |
|----------------|---------|
| 2-Chlorophenol | 2.18 |

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.

| Component | RCRA - U Series Wastes | RCRA - P Series Wastes |
|--------------------------|------------------------|------------------------|
| 2-Chlorophenol - 95-57-8 | U048 | - |

14. Transport information

DOT

UN-No UN201
 Proper Shipping Name CHLOROPHENOLS, LIQUID
 Hazard Class 6.1
 Packing Group III

TDG

UN-No UN201
 Proper Shipping Name CHLOROPHENOLS, LIQUID
 Hazard Class 6.1
 Packing Group III

IATA

UN-No UN201
 Proper Shipping Name CHLOROPHENOLS, LIQUID
 Hazard Class 6.1
 Packing Group III

IMDG/IMO

| | |
|-----------------------------|-----------------------|
| UN-No | UN2021 |
| Proper Shipping Name | CHLOROPHENOLS, LIQUID |
| Hazard Class | 6.1 |
| Packing Group | III |

15. Regulatory information**United States of America Inventory**

| Component | CAS No | TSCA | TSCA Inventory notification - Active-Inactive | TSCA - EPA Regulatory Flags |
|----------------|---------|------|---|-----------------------------|
| 2-Chlorophenol | 95-57-8 | X | ACTIVE | TP |

Legend:

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

X - Listed

- - Not Listed

TSCA - Per 40 CFR 751, Regulation of Certain Chemical Substances & Mixtures, Under TSCA Section 6(h) (PBT)

Not applicable

TSCA 12(b) - Notices of Export

Not applicable

International Inventories

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

| Component | CAS No | DSL | NDSL | EINECS | PICCS | ENCS | ISHL | AICS | IECSC | KECL |
|----------------|---------|-----|------|-----------|-------|------|------|------|-------|----------|
| 2-Chlorophenol | 95-57-8 | X | - | 202-433-2 | X | X | X | X | X | KE-05802 |

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

U.S. Federal Regulations**SARA 313****SARA 311/312 Hazard Categories**

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

| Component | CWA - Hazardous Substances | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants |
|----------------|----------------------------|-----------------------------|------------------------|---------------------------|
| 2-Chlorophenol | - | - | X | X |

Clean Air Act

Not applicable

OSHA - Occupational Safety and Health Administration

Not applicable

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

| Component | Hazardous Substances RQs | CERCLA Extremely Hazardous Substances | SARA Reportable Quantity (RQ) |
|-----------|--------------------------|---------------------------------------|-------------------------------|
|-----------|--------------------------|---------------------------------------|-------------------------------|

| | | RQs | |
|----------------|--------|-----|-------------------|
| 2-Chlorophenol | 100 lb | - | 100 lb 45.4 kg |

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 |
|----------------|---------------|------------|--------------|----------|--------------|
| 2-Chlorophenol | X | X | X | - | X |

U.S. Department of Transportation

Reportable Quantity (RQ): Y
 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

Authorisation/Restrictions according to EU REACH

Not applicable

| Component | CAS No | REACH (1907/2006) - Annex XIV - Substances Subject to Authorization | REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances | REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC) |
|----------------|---------|---|---|---|
| 2-Chlorophenol | 95-57-8 | - | - | - |

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) |
|----------------|---------|----------|------------------------------|---------------------------|--|
| 2-Chlorophenol | 95-57-8 | Listed | Not applicable | Not applicable | Not applicable |

Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)?

Not applicable

Other International Regulations

| Component | CAS No | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements | Rotterdam Convention (PIC) | Basel Convention (Hazardous Waste) |
|----------------|---------|---|--|----------------------------|------------------------------------|
| 2-Chlorophenol | 95-57-8 | Not applicable | Not applicable | Not applicable | Not applicable |

16. Other information**Prepared By**

Health, Safety and Environmental Department
 Email: chem.techinfo@thermofisher.com
 www.thermofisher.com

| | |
|-------------------------|--|
| Creation Date | 26-Oct-2010 |
| Revision Date | 29-Mar-2024 |
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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