

MATERIAL SAFETY DATA SHEET

Chemical Product

Product Name: 2-CHLOROPHENOL
CAS#: 95-57-8
Synonym: O-Chlorophenol
Chemical Name: 2-CHLOROPHENOL
Chemical Formula: C₆H₅ClO

Composition and Information on Ingredients

Name	S.K.U	% by Weight
2-CHLOROPHENOL	GCS-2354	100

Hazards Identification

Potential Acute Health Effects:

Very hazardous in case of skin contact (irritant), of ingestion, of inhalation. Hazardous in case of eye contact (irritant). Severe over-exposure can result in death.

Potential Chronic Health Effects:

CARCINOGENIC

EFFECTS:

Not available.

MUTAGENIC

EFFECTS:

Not available.

TERATOGENIC EFFECTS: Not available.

DEVELOPMENTAL TOXICITY: Classified Development toxin [POSSIBLE]. The substance may be toxic to kidneys, liver, upper respiratory tract, skin, central nervous system (CNS), legs. Repeated or prolonged exposure to the substance can produce target organs damage. Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

First Aid Measures

Eye Contact:

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

Skin Contact:

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention

immediately.

Serious Skin Contact:

Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Serious Inhalation:

Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek medical attention.

Ingestion:

If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

Serious Ingestion: Not available.

Fire and Explosion Data

Flammability of the

Product: Combustible.

Auto-Ignition

Temperature:

Not available.

Flash Points: CLOSED

CUP: 64°C (147.2°F).

Flammable Limits: Not available.

Products of Combustion: These products are carbon oxides (CO, CO₂), halogenated compounds.

Fire Hazards in Presence of Various Substances:

Highly flammable in presence of open flames and sparks, of heat.

Explosion Hazards in Presence of Various Substances:

Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions:

SMALL FIRE: Use DRY chemical powder.

LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Special Remarks on Fire Hazards: Not available.

Special Remarks on Explosion Hazards: Not available.

Accidental Release Measures

Small Spill:

Absorb with an inert material and put the spilled material in an appropriate waste disposal.

Large Spill:

Combustible material. Poisonous liquid. Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Do not get water inside container. Do not touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal.

Handling and Storage

Precautions:

Keep locked up.. Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapor/spray. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents.

Storage:

Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame).

Exposure Controls/Personal Protection

Engineering Controls:

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal Protection:

Splash goggles. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits: Not available.

Physical and Chemical Properties

Physical state and appearance: Liquid.

Odor	: Unpleasant.
Taste	: Not Available.
Molecular Weight	: 128.6 g/mole
Color	: Yellow. (Light.)
pH (1% soln/water)	: Not available.
Boiling Point	: 174.9°C (346.8°F)
Melting Point	: 9.8 (49.6°F)
Critical Temperature	: Not available.
Specific Gravity	: Not available.
Vapor Pressure	: 0.3 kPa (@ 20°C)
Vapor Density	: 4.4 (Air = 1)
Volatility	: Not available.
Odor Threshold	: 1.24 ppm
Water/Oil Dist. Coeff.	: The product is more soluble in oil; log(oil/water) = 2.1
Ionicity (in Water)	: Not available.
Dispersion Properties	: Dispersed in methanol. Partially dispersed in diethyl ether. See solubility in water, methanol, diethyl ether.
Solubility diethyl ether.	: Soluble in methanol. Partially soluble in diethyl ether.

Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of

Instability:

Not available.

Incompatibility with various substances: Reactive with oxidizing agents.

Corrosivity: Not available.

Special Remarks on

Reactivity: Not available.

Special Remarks on

Corrosivity: Not available.

Polymerization: Will not occur.

Toxicological Information

Routes of Entry: Absorbed through skin. Eye contact. Inhalation. Ingestion.
Toxicity to Animals: Acute oral toxicity (LD50): 40 mg/kg [Rat].

Chronic Effects on Humans:

DEVELOPMENTAL TOXICITY: Classified Development toxin [POSSIBLE]. May cause damage to the following organs: kidneys, liver, upper respiratory tract, skin, central nervous system (CNS), legs.

Other Toxic Effects on Humans:

Very hazardous in case of skin contact (irritant), of ingestion, of inhalation.
Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.
Special Remarks on other Toxic Effects on Humans: Not available.

Toxicological Data on Ingredients: 2-Chlorophenol : ORAL (LD50): Acute: 40 mg/kg [Rat]. 345 mg/kg [Mouse].

Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation:

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation:

The products of degradation are as toxic as the product itself.
Special Remarks on the Products of Biodegradation: Not available.

Disposal Considerations

Waste Disposal:

Transformation Information

Land transport (ADR-RID)

Proper shipping name: CHLOROPHENOLS, LIQUID

UN N°: 2021

H.I. nr: 60

ADR - Class: 6.1

Labelling - Transport: 6.1 : Toxic substances.

ADR – Group: III

Sea transport (IMDG) [English only]

Proper shipping name: CHLOROPHENOLS, LIQUID

UN N°: 2021

IMO-IMDG - Class or division: 6.1 : Toxic substances.

IMO-IMDG - Packing group: III

Air transport (ICAO-IATA) [English only] Proper shipping name:

CHLOROPHENOLS, LIQUID UN

N°: 2021

IATA - Class or division: 6.1 : Toxic substances.

IATA - Packing group: III

Other Regulatory Information

Federal and State Regulations:

Pennsylvania RTK: o-Chlorophenol Minnesota: o-Chlorophenol Massachusetts RTK: o-Chlorophenol New Jersey: o-Chlorophenol TSCA 8(b) inventory: o-Chlorophenol TSCA 8(d) H and S data reporting: o-Chlorophenol: June 1999

Other Regulations:

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

Other Classifications:

WHMIS (Canada): CLASS B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C (200°F). CLASS D-1A: Material causing immediate and serious toxic effects (VERY TOXIC). CLASS D-2B: Material causing other toxic effects (TOXIC).

DSCL (EEC): R25- Toxic if swallowed. R36/38- Irritating to eyes and skin. R40- Possible risks of irreversible effects. R63- Possible risk of harm to the unborn child.

HMIS (U.S.A.):

Health Hazard: 2

Fire Hazard: 2

Reactivity: 0

Personal Protection: h

National Fire Protection

Association (U.S.A.): Health: 3

Flammability: 2

Reactivity: 0

Specific hazard:

Protective Equipment:
Gloves. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Splash goggles.



Additional Information

References: Not available.

Other Special Considerations: Not available.

Disclaimer:

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