

SAFETY DATA SHEET

Creation Date 26-Oct-2010

Revision Date 24-Dec-2021

Revision Number 4

Product Name	1. Identification 2-Chlorophenol
Cat No. :	AC180990000; AC180990025; AC180990050; AC180990100; AC180991000; AC180995000
CAS No Synonyms	95-57-8 o-chlorophenol.; 0-chlorophenic acid; 2-hydroxychlorobenzene
Recommended Use Uses advised against	Laboratory chemicals. Food, drug, pesticide or biocidal product use.
Details of the supplier of the	safety data sheet
Company	Acros Organica

Fisher Scientific Company One Reagent Lane Fair Lawn, NJ 07410 Tel: (201) 796-7100 Acros Organics One Reagent Lane Fair Lawn, NJ 07410

Emergency Telephone Number

For information **US** call: 001-800-ACROS-01 / **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	Num data available
Upper Lower	No data available No data available
Sensitivity to Mechanical Impa	

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 rel	ease measures	
Personal Precautions Environmental Precautions	Remove all sources of ignition. Take precautionary measures against static discharges. 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 Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder,

2-Chlorophenol

Up	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 awa from heat, sparks and flame. Keep containers tightly closed in a dry, cool and well-ventilated place. Incompatible Materials. Strong oxidizing agents. Acid anhydric Acid chlorides.			
8. E	Exposure controls / personal protection		
Exposure Guidelines	This product does not contain any hazardous materials with occupational exposure limitsestablished 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.		
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
рН	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 CI 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	s 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	LD50 Oral	LD50 Oral		LC50 Inhalation		
2-Chlorophenol	LD50 = 670 mg/kg (Rat) LD50 100	LD50 1000 - 1580 mg/kg (Rat)		LC50 = 2.05 mg/L (Rat) 4 h	
oxicologically Synergistic Products	No information availa	able		1		
elayed and immediate effect	ts as well as chronic effects	s from short an	d long-term exposu	re		
rritation	No information availa	able				
Sensitization	No information availa	able				
Carcinogenicity	The table below indic	cates whether ea	ach agency has listed	any ingredient	as a carcinoge	
Component CAS	No IARC	NTP	ACGIH	OSHA	Mexico	
2-Chlorophenol 95-5	7-8 Not listed	Not listed	Not listed	Not listed	Not listed	
lutagenic Effects	Not mutagenic in AM	IES Test				
Reproductive Effects	No information availa	able.				
Developmental Effects	No information availa	No information available.				
Feratogenicity	No information availa	No information available.				
STOT - single exposureNone knownSTOT - repeated exposureNone known						
Aspiration hazard	No information availa	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
Component 2-Chlorophenol	Freshwater Algae EC50: = 70 mg/L, 96h (Selenastrum capricornutum)	Freshwater Fish LC50: 7.6 - 15.4 mg/L, 96h static (Oryzias latipes) LC50: = 13.8 mg/L, 96h semi-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	EC50 = 18.1 mg/L 5 min EC50 = 21.1 mg/L 30 min EC50 = 6.8 mg/L 1 h	Water Flea EC50: 3.31 - 4.91 mg/L, 48h Static (Daphnia magna) EC50: = 7.4 mg/L, 48h (Daphnia magna)
		flow-through (Pimephales promelas) LC50: 17.68 - 23.64 mg/L, 96h static (Poecilia reticulata)		

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	2.15
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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

UN2021
CHLOROPHENOLS, LIQUID
6.1
III
UN2021
CHLOROPHENOLS, LIQUID
6.1
III
UN2021
CHLOROPHENOLS, LIQUID
6.1
111

IMDG/IMO

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

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	Х	ACTIVE	TP

Legend:

TSCA US EPA (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), 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	Х	-	202-433-2	Х	Х	Х	Х	Х	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 See section 2 for more information

CWA (Clean Water Act)

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

Clean Ai	r Act
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Not applicable

OSHA - Occupational Safety and Not applicable Health Administration

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)

Component	Hazardous Substances RQs	CERCLA EHS RQs	
2-Chlorophenol	100 lb	-	

This product does not contain any Proposition 65 chemicals.

California Proposition 65

U.S. State Right-to-Know Regulations

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
2-Chlorophenol	Х	Х	Х	-	Х

U.S. Department of Transportation Reportable Quantity (RQ): DOT Marine Pollutant DOT Severe Marine Pollutant	Y N 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

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
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	Regulatory Affairs Thermo Fisher Scientific Email: EMSDS.RA@thermofisher.com
Creation Date Revision Date Print Date Revision Summary	26-Oct-2010 24-Dec-2021 24-Dec-2021 This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

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