

Revision number: 3 Revision date: 11/10/2015

1. **IDENTIFICATION**

Product name: Product code:

2-Chloro-4-fluorophenol C1598

Product use: Restrictions on use:

2. HAZARD(S) IDENTIFICATION

OSHA Haz Com: CFR 1910.1200:

Skin Corrosion/Irritation [Category 2] Eye Damage/Irritation [Category 2A]

Signal word:

Warning!

Hazard Statement(s):

Causes serious eye irritation Causes skin irritation

Pictogram(s) or Symbol(s):



Precautionary Statement(s): [Prevention] [Response]

[Disposal]

Wash hands and face thoroughly after handling. Wear protective gloves. Wear eye and face protection. If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.

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SAFETY DATA SHEET

TCI AMERICA

For laboratory research purposes. Not for drug or household use.

Company:	Emergency telephone number:
TCI America	Chemical Emergencies:
9211 N. Harborgate Street	TCI America (8:00am - 5:00pm) PST
Portland, OR 97203 U.S.A.	+1-503-286-7624
Telephone:	Transportation Emergencies:
+1-800-423-8616 / +1-503-283-1681	Chemtrec 24-Hour
Fax:	+1-800-424-9300 (U.S.A.)
+1-888-520-1075 / +1-503-283-1987	+1-703-527-3887 (International)
e-mail:	Responsible department:
sales-US@TCIchemicals.com	TCI America
www.TCIchemicals.com	Environmental Health Safety and Security +1- 503-286-7624



[Storage]

None None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture:
Components:
Percent:
CAS Number:
Molecular Weight:
Chemical Formula:

Substance 2-Chloro-4-fluorophenol >98.0%(GC) 1996-41-4 146.55 C₆H₄CIFO

4. FIRST-AID MEASURES

Inhalation:	Call a poison center or doctor if you feel unwell. Move victim to fresh air. Give artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult. Keep victim warm and quiet. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and
Skin contact:	take precautions to protect themselves. If skin irritation occurs get medical advice/attention. Remove and wash contaminated clothing before re- use. In case of contact with substance, immediately flush skin with running water for at least 20 minutes. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s)
Eye contact:	involved and take precautions to protect themselves. IMMEDIATELY flush eyes with running water for at least 15 minutes, keeping eyelids open. Contact with material may irritate or burn eyes. Call emergency medical service. Move victim to fresh air. Check for and remove any contact lenses. Keep victim warm and quiet. Treat symptomatically and supportively. Effects of exposure to substance may be delayed. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.
Ingestion:	Do not induce vomiting with out medical advice. If swallowed, seek medical advice immediately and show the container or label. Do not use mouth-to-mouth method if victim ingested the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Loosen tight clothing such as a collar, tie, belt or waistband. If a person vomits place them in the recovery position so that vomit will not reenter the mouth and throat. Rinse mouth. Keep victim warm and quiet. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.
Symptoms/effects:	
Acute: Delayed:	Redness. No data available
Immediate medical attention:	If breathing has stopped, perform artificial respiration. Use first aid treatment according to the nature of the injury. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.
5. FIRE-FIGHTING MEASURES	
Suitable extinguishing media:	Dry chemical, CO ₂ , sand, earth, water spray or regular foam Consult with local fire authorities before attempting large scale fire fighting operations.
Specific hazards arising from the chen Hazardous combustion products: Other specific hazards:	nical These products include: Carbon oxides Halogenated compounds WARNING: Highly toxic HCl gas is produced during combustion. WARNING: Highly toxic HF gas is produced during combustion.
Special precautions for fire-fighters: Use water spray or fog: do not use straigh	nt streams. Dike fire-control water for later disposal: do not scatter the material. Containers may explode when

Use water spray or fog; do not use straight streams. Dike fire-control water for later disposal; do not scatter the material. Containers may explode when heated. Move containers from fire area if you can do it without risk.

Special protective equipment for fire-fighters:

Wear positive pressure self-contained breathing apparatus (SCBA). Structural fire fighters' protective clothing provides limited protection in fire situations ONLY; it may not be effective in spill situations. Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	Avoid contact with skin, eyes, and clothing. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing (Section 8). Warn unnecessary personnel to move away. Stop leak if you can do it without risk. Ensure adequate ventilation. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.
Personal protective equipment:	Wear eye protection (splash goggles) and face protection (full length face shield). Lab coat. Dust respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent. Wear protective gloves (nitrile).
Emergency procedures:	Prevent dust cloud. In case of a spill and/or a leak, always shut off any sources of ignition, ventilate the area, and excercise caution. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Warn personnel to move away. Prevent entry into sewers, basements or confined areas; dike if needed.

Methods and materials for containment and cleaning up:

ELIMINATE all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop leak if without risk. Ventilate the area. Absorb with an inert material and put the spilled material in an appropriate waste disposal container. Use clean non-sparking tools to collect absorbed material. **Environmental precautions:**

Prevent further leakage or spillage if safe to do so. Water runoff can cause environmental damage. Prevent entry into sewers, basements or confined areas; dike if needed.

7. HANDLING AND STORAGE Precautions for safe handling: Avoid inhalation of vapor or mist. Avoid contact with skin and eyes. Good general ventilation should be sufficient to control airborne levels. Keep container dry. Handle and open container with care. Wear suitable protective clothing, gloves and eye/face protection. When using do not eat, drink, or smoke. Keep away from sources of ignition. Conditions for safe storage: Keep only in the original container in a cool well-ventilated place. Keep away from incompatibles. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Avoid prolonged storage periods. Store under inert gas (e.g. Argon). Store in refrigerator. Combustible substances, Store away from oxidizing agents

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure	limits:	No

Appropriate engineering controls:

Good general ventilation should be sufficient to control airborne levels. Ventilation is normally required when handling or using this product. Eyewash fountains should be provided in areas where there is any possibility that workers could be exposed to the substance. Follow safe industrial engineering/laboratory practices when handling any chemical.

Personal protective equipment

Respiratory protection:Dust respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent.Hand protection:Nitrile gloves.Eye protection:Safety glasses.Skin and body protection:Lab coat.

data available

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (20°C): Form: Color: Odor: Odor threshold:	Solid Crystal - Lump White - Pale yellow No data available No data available		
Melting point/freezing point: Boiling point/range: Decomposition temperature: Relative density: Kinematic Viscosity:	21°C (Freezing point) (70°F) 172°C (342°F) No data available No data available No data available No data available	pH: Vapor pressure: Vapor density: Dynamic Viscosity:	No data available No data available No data available No data available
Partition coefficient: n-octanol/water (log Pow)	No data available	Evaporation rate: (Butyl Acetate = 1)	No data available
Flash point: Flammability (solid, gas):	75°C (167°F) No data available	Autoignition temperature: Flammability or explosive limits Lower: No data ava	
- · · · · · · · · · · · · · · · · · · ·		Upper: No data ava	ailable

Solubility(ies):

10. STABILITY AND REACTIVITY

Reactivity: Chemical Stability: Possibility of Hazardous Reactions: Conditions to avoid: Incompatible materials: Hazardous Decomposition Products: Not Available. Air sensitive. Heat sensitive. No hazardous reactivity has been reported. Air sensitive. Exposure to air. Heat sensitive. Strong bases, Strong oxidizing agents No data available

11. TOXICOLOGICAL INFORMATION

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Acute Toxicity: No data available		
Skin corrosion/irritation: No data available		
Serious eye damage/irritation: No data available		
Respiratory or skin sensitization: No data available		
Germ cell mutagenicity: No data available		
Carcinogenicity:		
No data available		
IARC: No data available	NTP: No data available	OSHA: No data available
Reproductive toxicity: No data available		
or dry skin. Eye contact may result in redne Potential Health Effects:	ss or pain.	ally blistering. Skin contact may result in redness, pain
Skin and eye contact may result in irritation Target organ(s):	No data available	
12. ECOLOGICAL INFORMATION		
Ecotoxicity Fish:	No data available	
Crustacea:	No data available	
Algae:	No data available	
Persistence and degradability:	No data available	
Bioaccumulative potential (BCF): Mobillity in soil:	No data available No data available	
Partition coefficient:	No data available	
n-octanol/water (log P _{ow}) Soil adsorption (Koc):	No data available	
Henry's Law:	No data available	
constant (PaM³/mol)		
13. DISPOSAL CONSIDERATIONS	Donuelo to proposo if possible. It is the report of	reananaibility to comply with Endered. Otate and Land
Disposal of product:	rules and regulations. You may be able to dissolve chemical incinerator equipped with an afterburner a assistance but does not replace these laws, nor do regulatory compliance according to the law. US EF	responsibility to comply with Federal, State and Local or mix material with a combustible solvent and burn in a and scrubber system. This section is intended to provide bes compliance in accordance with this section ensure A guidelines for Identification and Listing of Hazardous a should not be allowed to enter the environment, drains,
Disposal of container: Other considerations:	Dispose of as unused product. Do not re-use empt Observe all federal, state and local regulations whe	
14. TRANSPORT INFORMATION	Coorre an reactar, state and local regulations with	on disposing of the substance.
DOT (US)	Non-hazardous for transportation.	
ΙΑΤΑ	Non-hazardous for transportation.	
IMDG	Non-hazardous for transportation.	

15. REGULATORY INFORMATION

Toxic Substance Control Act (TSCA 8b.):

This product is NOT on the EPA Toxic Substances Control Act (TSCA) inventory. The following notices are required by 40 CFR 720.36 (C) for those products not on the inventory list:

(i) These products are supplied solely for use in research and development by or under the supervision of a technically qualified individual as defined in 40 CFR 720.0 et sec.

(ii) The health risks of these products have not been fully determined. Any information that is or becomes available will be supplied on a SDS sheet.

US Federal Regulations

CERCLA Hazardous substance and Reportable Quantity:

SARA 313:	Not Listed
SARA 302:	Not Listed

State Regulations

State Right-to-Know

Massachusetts	Not Listed
New Jersey	Not Listed
Pennsylvania	Not Listed
California Proposition 65:	Not Listed

Other Information

NFPA Rating:

Health:	0	Health:
Flammability:	2	Flammability:
Instability:	0	Physical:

International Inventories

WHMIS hazard class: EC-No: D2B: Materials causing other toxic effects. (Toxic) 217-876-7

HMIS Classification:

0

2 0

16. OTHER INFORMATION

Revision date: 11/10/2015

Revision number: 3

TCI chemicals are for research purposes only and are NOT intended for use as drugs, food additives, households, or pesticides. The information herein is believed to be correct, but does not claim to be all inclusive and should be used only as a guide. Neither the above named supplier nor any of its affiliates or subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All chemical reagents must be handled with the recognition that their chemical, physiological, toxicological, and hazardous properties have not been fully investigated or determined. All chemical reagents should be handled only by individuals who are familiar with their potential hazards and who have been fully trained in proper safety, laboratory, and chemical handling procedures. Although certain hazards are described herein, we can not guarantee that these are the only hazards which exist. Our SDS are based only on data available at the time of shipping and are subject to change without notice as new information is obtained. Avoid long storage periods since the product is subject to degradation with age and may become more dangerous or hazardous. It is the responsibility of the user to request updated SDS for products that are stored for extended periods. Disposal of unused product must be undertaken by qualified personnel who are knowledgeable in all applicable regulations and follow all pertinent safety precautions including the use of appropriate protective equipment (e.g. protective goggles, protective clothing, breathing equipment, face mask, fume hood). For proper handling and disposal, always comply with federal, state and local regulations.