

SAFETY DATA SHEET

Revision Date 31-Mar-2024 Revision Number 3

1. Identification

Product Name 4-Chloro-2-fluoro-3-methoxybenzoyl chloride

Cat No.: H34343

Synonyms No information available

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)

Skin Corrosion/IrritationCategory 1BSerious Eye Damage/Eye IrritationCategory 1Specific target organ toxicity (single exposure)Category 3

Target Organs - Respiratory system.

Label Elements

Signal Word

Danger

Hazard Statements

Causes severe skin burns and eye damage May cause respiratory irritation



Precautionary Statements

Prevention

Do not breathe dust/fume/gas/mist/vapors/spray

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves/protective clothing/eve protection/face protection

Use only outdoors or in a well-ventilated area

Response

Immediately call a POISON CENTER or doctor/physician

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

Wash contaminated clothing before reuse

Eves

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing **Ingestion**

IF SWALLOWED: Rinse mouth. DO NOT induce vomiting

Storage

Store locked up

Store in a well-ventilated place. Keep container tightly closed

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

None identified

3. Composition/Information on Ingredients

Component	CAS No	Weight %	
4-Chloro-2-fluoro-3-methoxybenzoyl chloride	N/A	<=100	

4. First-aid measures

General Advice Show this safety data sheet to the doctor in attendance. Immediate medical attention is

required.

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Immediate medical attention is required. Keep eye wide open while rinsing.

Skin Contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. Call a physician immediately.

Inhalation Remove to fresh air. If not breathing, give artificial respiration. Call a physician or poison

control center immediately. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a

one-way valve or other proper respiratory medical device.

Immediate medical attention is required. Do NOT induce vomiting. Drink plenty of water.

Never give anything by mouth to an unconscious person.

Most important symptoms and

effects

Causes burns by all exposure routes. Product is a corrosive material. Use of gastric layage 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 Treat symptomatically

Notes to Physician

Fire-fighting measures

Suitable Extinguishing Media Carbon dioxide (CO₂). Powder. Water spray. In case of major fire and large quantities:

Evacuate area. Fight fire remotely due to the risk of explosion. CO2, dry chemical, dry sand,

alcohol-resistant foam.

Unsuitable Extinguishing Media No information available

Flash Point No information available Method -No information available

Autoignition Temperature

Explosion Limits

No information available

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

The product causes burns of eyes, skin and mucous membranes.

Hazardous Combustion Products

Carbon monoxide (CO). Carbon dioxide (CO₂). Hydrogen chloride. Hydrogen fluoride.

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. Thermal decomposition can lead to release of irritating gases and vapors.

NFPA

Health	Flammability	Instability	Physical hazards
3	1	0	-

6. Accidental release measures

Personal Precautions Use personal protective equipment as required. Evacuate personnel to safe areas. Avoid

contact with skin, eves or clothing.

Environmental Precautions Should not be released into the environment. Do not allow material to contaminate ground

water system. See Section 12 for additional Ecological Information.

Methods for Containment and Clean Sweep up and shovel into suitable containers for disposal. Avoid dust formation. Up

	7. Handling and storage
Handling	Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Use only under a chemical fume hood. Do not breathe dust. Do not ingest. If swallowed then seek immediate medical assistance.
Storage.	Corrosives area. Keep containers tightly closed in a dry, cool and well-ventilated place. Incompatible Materials. Strong bases. Oxidizing agent.

8. Exposure controls / personal protection

This product does not contain any hazardous materials with occupational exposure **Exposure Guidelines** limitsestablished by the region specific regulatory bodies.

Engineering Measures Ensure that eyewash stations and safety showers are close to the workstation location.

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 protectionWear 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: Particulates filter conforming to EN 143.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Physical State Solid

AppearanceNo information availableOdorNo information availableOdor ThresholdNo information availablepHNo information available

Melting Point/RangeNo data availableBoiling Point/RangeNo information availableFlash PointNo information available

Evaporation Rate Not applicable

Flammability (solid,gas)

No information available

Flammability or explosive limits

UpperNo data availableLowerNo data availableVapor PressureNo information available

Vapor Density Not applicable

Specific GravityNo information availableSolubilityNo information availablePartition coefficient; n-octanol/waterNo data available

Autoignition TemperatureNo information availableDecomposition TemperatureNo information available

ViscosityNot applicableMolecular FormulaC8 H5 Cl2 FO2

Molecular Weight 223.03

10. Stability and reactivity

Reactive Hazard None known, based on information available

Stability Moisture sensitive.

Conditions to Avoid Incompatible products.

Incompatible Materials Strong bases, Oxidizing agent

Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO2), Hydrogen chloride, Hydrogen fluoride

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing.

11. Toxicological information

Acute Toxicity

Product Information Component Information

Toxicologically Synergistic

No information available

Products

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation No information available

No information available Sensitization

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico
4-Chloro-2-fluoro-3-me	N/A	Not listed				
thoxybenzovl chloride						

Mutagenic Effects No information available

No information available. **Reproductive Effects**

Developmental Effects No information available.

No information available. **Teratogenicity**

STOT - single exposure Respiratory system

STOT - repeated exposure None known

No information available **Aspiration hazard**

delayed

Symptoms / effects,both acute and 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

Endocrine Disruptor Information No information available

Other Adverse Effects The toxicological properties have not been fully investigated.

12. Ecological information

Ecotoxicity

Do not empty into drains.

Persistence and Degradability No information available

Bioaccumulation/ Accumulation No information available.

Mobility No information available.

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

UN3261 **UN-No**

Proper Shipping Name Corrosive solid, acidic, organic, n.o.s.

Technical Name (4-Chloro-2-fluoro-3-methoxybenzoyl chloride)

Hazard Class Ш **Packing Group**

TDG

UN-No UN3261

Proper Shipping Name Corrosive solid, acidic, organic, n.o.s.

Hazard Class Packing Group Ш

IATA

UN-No UN3261

Proper Shipping Name Corrosive solid, acidic, organic, n.o.s.

Hazard Class Packing Group Ш

IMDG/IMO

UN-No UN3261

Proper Shipping Name Corrosive solid, acidic, organic, n.o.s.

Hazard Class Packing Group Ш

15. Regulatory information

United States of America Inventory

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	TSCA - EPA Regulatory Flags
4-Chloro-2-fluoro-3-methoxybenzo yl chloride	N/A	-	-	-

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
4-Chloro-2-fluoro-3-methoxybenzo	N/A	-	-	-	-	-		-	-	-
yl chloride										

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

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

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) Not applicable

Clean Air Act Not applicable

OSHA - Occupational Safety and

Health Administration

Not applicable

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

California Proposition 65 This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know

Regulations

Not applicable

U.S. Department of Transportation

Reportable Quantity (RQ): Ν **DOT Marine Pollutant** Ν **DOT Severe Marine Pollutant** Ν

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 Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
4-Chloro-2-fluoro-3-methoxybenzoyl chloride	N/A	-	-	-

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)
4-Chloro-2-fluoro-3-methoxyb enzoyl chloride	N/A	Not applicable	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	Seveso III Directive	Rotterdam	Basel Convention

		(2012/18/EC) - Qualifying Quantities	(2012/18/EC) - Qualifying Quantities	Convention (PIC)	(Hazardous Waste)
		for Major Accident Notification	for Safety Report Requirements		
4-Chloro-2-fluoro-3-methoxyb enzoyl chloride	N/A	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

Revision Date 31-Mar-2024 Print Date 31-Mar-2024

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