

SAFETY DATA SHEET

Revision Date 25-Dec-2021

Revision Number 4

1. Identification

Product Name

2-Chloro-4-fluorobenzoic acid

Cat No. :

AC347340000; AC347340050; AC347340250

CAS No Synonyms 2252-51-9 No information available

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

Details of the supplier of the safety data sheet

<u>Company</u>

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)

Acute oral toxicity Skin Corrosion/Irritation Serious Eye Damage/Eye Irritation Specific target organ toxicity (single exposure) Target Organs - Respiratory system. Category 4 Category 2 Category 2 Category 3

Label Elements

Signal Word Warning

Hazard Statements Harmful if swallowed Causes skin irritation Causes serious eye irritation May cause respiratory irritation



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

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

If skin irritation occurs: Get medical advice/attention

Take off contaminated clothing and wash before reuse

Eyes

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/attention

Ingestion

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

Storage

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

Store locked up

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

None identified

3. Composition/Information on Ingredients

Compo	Weight %						
2-Chloro-4-fluor	obenzoic acid	2252-51-9	99				
	4.	First-aid measures					
Eye Contact	Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. 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 not breathing, give artificial respiration. Get medical attention.					
Ingestion	Clean mouth with water. Get medical attention.						

Most important symptoms and effects	No information available.							
Notes to Physician	Treat symptomatically							
	5. Fire-fighting	measures						
Suitable Extinguishing Media	Water spray. Carbon dioxide (CO 2). Drv chemical. Chemica	l foam.					
Unsuitable Extinguishing Media	No information available	, ,						
Flash Point Method -	No information available No information available							
Autoignition Temperature Explosion Limits	No information available							
Upper	No data available							
Lower Sensitivity to Mechanical Impact	No data available							
Sensitivity to Static Discharge	No information available							
Specific Hazards Arising from the Chemical Keep product and empty container away from heat and sources of ignition. Hazardous Combustion Products Carbon monoxide (CO). Carbon dioxide (CO ₂). Gaseous hydrogen fluoride (HF). 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 Equipment and Precautio	ns for Firefighters		-					
Protective Equipment and Precaution As in any fire, wear self-contained breat	ns for Firefighters		-					
Protective Equipment and Precautio As in any fire, wear self-contained brea protective gear. <u>NFPA</u> Health	ns for Firefighters athing apparatus pressure-dem Flammability	and, MSHA/NIOSH (approved Instability 0	or equivalent) and full Physical hazards					
Protective Equipment and Precautio As in any fire, wear self-contained brea protective gear. <u>NFPA</u> Health	ns for Firefighters athing apparatus pressure-dem Flammability 0	and, MSHA/NIOSH (approved Instability 0 ASE measures Jse personal protective equipr	or equivalent) and full Physical hazards N/A					
Protective Equipment and Precautio As in any fire, wear self-contained brea protective gear. NFPA Health 2 Personal Precautions	Flammability 0 6. Accidental relea Ensure adequate ventilation. U See Section 12 for additional l	Instability 0 ase measures Jse personal protective equipr Ecological Information.	or equivalent) and full Physical hazards N/A					
Protective Equipment and Precautio As in any fire, wear self-contained breat protective gear. NFPA Health 2 Personal Precautions Environmental Precautions Methods for Containment and Clean	Flammability 0 6. Accidental relea Ensure adequate ventilation. U See Section 12 for additional l	Instability 0 ase measures Jse personal protective equipr Ecological Information. able containers for disposal.	or equivalent) and full Physical hazards N/A					
Protective Equipment and Precautio As in any fire, wear self-contained breat protective gear. NFPA Health 2 Personal Precautions Environmental Precautions Methods for Containment and Clean	Flammability 0 6. Accidental relea Ensure adequate ventilation. U See Section 12 for additional I Sweep up and shovel into suit	Instability 0 ase measures Jse personal protective equipr Ecological Information. able containers for disposal.	or equivalent) and full Physical hazards N/A					
Protective Equipment and Precautio As in any fire, wear self-contained brea protective gear. NFPA Health 2 Personal Precautions Environmental Precautions Methods for Containment and Clean Up	Flammability 0 6. Accidental relea Ensure adequate ventilation. I See Section 12 for additional I Sweep up and shovel into suit 7. Handling an	Instability 0 ASE MEASURES Use personal protective equipr Ecological Information. able containers for disposal. d storage es. Do not breathe dust. entilated place. Keep containe	or equivalent) and full Physical hazards N/A nent as required.					
Protective Equipment and Precaution As in any fire, wear self-contained breat protective gear. NFPAHealth 2 Personal Precautions Environmental Precautions Methods for Containment and Clean Up Handling Storage.	Flammability 0 6. Accidental relea Ensure adequate ventilation. U See Section 12 for additional I Sweep up and shovel into suit 7. Handling an Avoid contact with skin and ey Keep in a dry, cool and well-ve Materials. Strong oxidizing ag	Instability 0 ASE MEASURES Jse personal protective equipr Ecological Information. able containers for disposal. d storage es. Do not breathe dust. entilated place. Keep containe ents. Strong bases.	or equivalent) and full Physical hazards N/A nent as required. r tightly closed. Incompatible					
Protective Equipment and Precaution As in any fire, wear self-contained breat protective gear. NFPAHealth 2 Personal Precautions Environmental Precautions Methods for Containment and Clean Up Handling Storage.	Flammability 0 6. Accidental relea Ensure adequate ventilation. I See Section 12 for additional I Sweep up and shovel into suit 7. Handling an Avoid contact with skin and ey Keep in a dry, cool and well-va	Instability 0 ASE MEASURES Jse personal protective equiprecological Information. able containers for disposal. d storage es. Do not breathe dust. entilated place. Keep containe ents. Strong bases.	or equivalent) and full Physical hazards N/A nent as required. r tightly closed. Incompatible					
Protective Equipment and Precaution As in any fire, wear self-contained breat protective gear. NFPAHealth 2 Personal Precautions Environmental Precautions Methods for Containment and Clean Up Handling Storage. 8. Ex	Flammability 0 6. Accidental relea Ensure adequate ventilation. I See Section 12 for additional I Sweep up and shovel into suit 7. Handling an Avoid contact with skin and ey Keep in a dry, cool and well-ve Materials. Strong oxidizing ag posure controls / p This product does not contain	Instability 0 ASE MEASURES Jse personal protective equiprecological Information. able containers for disposal. d storage es. Do not breathe dust. entilated place. Keep containe ents. Strong bases. ersonal protection any hazardous materials with specific regulatory bodies.	or equivalent) and full Physical hazards N/A nent as required. r tightly closed. Incompatible Coccupational exposure					

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	No protective equipment is needed under normal use conditions.
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

_	
Physical State	Solid
Appearance	White
Odor	No information available
Odor Threshold	No information available
рН	No information available
Melting Point/Range	183 - 186 °C / 361.4 - 366.8 °F
Boiling Point/Range	No information available
Flash Point	No information available
Evaporation Rate	Not applicable
Flammability (solid,gas)	No information available
Flammability or explosive limits	
Upper	No data available
Lower	No data available
Vapor Pressure	No information available
Vapor Density	Not applicable
Specific Gravity	No information available
Solubility	No information available
Partition coefficient; n-octanol/water	No data available
Autoignition Temperature	No information available
Decomposition Temperature	No information available
Viscosity	Not applicable
Molecular Formula	C7 H4 CI F O2
Molecular Weight	174.56

10. Stability and reactivity

Reactive Hazard	None known, based on information available
Stability	Stable under normal conditions.
Conditions to Avoid	Incompatible products.
Incompatible Materials	Strong oxidizing agents, Strong bases
Hazardous Decomposition Product	s Carbon monoxide (CO), Carbon dioxide (CO ₂), Gaseous hydrogen fluoride (HF), Hydrogen chloride gas
Hazardous Polymerization	No information available.
Hazardous Reactions	None under normal processing.
	11. Toxicological information
Acute Toxicity	
Product Information Component Information	No acute toxicity information is available for this product
Toxicologically Synergistic	No information available

Products

Irritation		No information ava	ailable					
Sensitization		No information available						
Carcinogenicity		The table below indicates whether each agency has listed any ingredient as a carcinoger						
Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico		
2-Chloro-4-fluorobenz oic acid	2252-51-9	Not listed	Not listed	Not listed	Not listed	Not listed		
Mutagenic Effects	l	No information ava	ailable		1]		
Reproductive Effect	ts	No information ava	ailable.					
Developmental Effe	ects	No information ava	ailable.					
Teratogenicity		No information ava	ailable.					
STOT - single expos STOT - repeated ex		Respiratory systen None known	n					
Aspiration hazard		No information ava	ailable					
Symptoms / effects delayed	s,both acute and	No information ava	ailable					
Endocrine Disrupto	r Information	No information ava	ailable					
Other Adverse Effe	cts	The toxicological p	properties have no	t been fully investig	gated.			
		12. Ecol	ogical infor	mation				
Ecotoxicity Do not empty into dra	ains.							
Persistence and De	gradability	No information ava	ailable					
Bioaccumulation/ A	ccumulation	No information ava	ailable.					
Mobility		No information ava	ailable.					
		13. Dispo	sal conside	erations				
Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classif hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification								
		14. Tran	sport infor	mation				
DOT		Not regulated						
TDG		Not regulated						
IATA		Not regulated						
IMDG/IMO		Not regulated						
		15. Regu	latory infor	mation				
United States of Am	nerica Inventory							

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

Component CAS No	TSCA	TSCA Inventory notification - Active-Inactive	TSCA - EPA Regulatory Flags
------------------	------	--	--------------------------------

2-Chloro-4-fluorobenzoic acid	2252-51-9	Х	ACTIVE	PMN;S;5E

Legend:

TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710) X - Listed '-' - Not Listed PMN - Indicates a commenced PMN substance

TSCA 12(b) - Notices of Export

Component	CAS No	TSCA 12(b) - Notices of Export
2-Chloro-4-fluorobenzoic acid	2252-51-9	Section 5

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-Chloro-4-fluorobenzoic acid	2252-51-9	-	-	218-845-0	-	-		-	-	KE-05687

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

U.S. Federal Regulations

SARA 313	Not applicable
SARA 311/312 Hazard Categories	See section 2 for more information
CWA (Clean Water Act)	Not applicable
Clean Air Act	Not applicable
OSHA - Occupational Safety and Health Administration	Not applicable
CERCLA	Not applicable
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): DOT Marine Pollutant DOT Severe Marine Pollutant U.S. Department of Homeland Security Other International Regulations	N N N This product does not contain any DHS chemicals.
Mexico - Grade	No information available
Authorisation/Restrictions accordin	ng 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-Chloro-4-fluorobenzoic acid	2252-51-9	Not applicable	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-Chloro-4-fluorobenzoic acid	2252-51-9	Not applicable	Not applicable	Not applicable	Not applicable

16. Other information	
Prepared By	Regulatory Affairs Thermo Fisher Scientific Email: EMSDS.RA@thermofisher.com
Revision Date Print Date Revision Summary	25-Dec-2021 25-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