

SAFETY DATA SHEET

Revision Date 31-March-2024 Revision Number 3

1. Identification

Product Name 3-Fluoro-2-(trifluoromethyl)benzonitrile

Cat No.: H26590

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

Importer/Distributor

Fisher Scientific 112 Colonnade Road, Ottawa, ON K2E 7L6,

Canada

Tel: 1-800-234-7437

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

WHMIS 2015 Classification Classified as hazardous under the Hazardous Products Regulations (SOR/2015-17)

Acute oral toxicity
Category 4
Acute dermal toxicity
Category 4
Acute Inhalation Toxicity
Category 4
Skin Corrosion/Irritation
Category 2
Serious Eye Damage/Eye Irritation
Category 2
Specific target organ toxicity (single exposure)
Category 3

Target Organs - Respiratory system.

Label Elements

Signal Word

Warning

Hazard Statements

Harmful if swallowed, in contact with skin or if inhaled

Causes skin irritation Causes serious eye irritation May cause respiratory irritation Harmful if inhaled



Precautionary Statements

Prevention

Avoid breathing dust/fume/gas/mist/vapors/spray

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Use only outdoors or in a well-ventilated area

Wear protective gloves/protective clothing/eye protection/face protection

Response

IF ON SKIN: Wash with plenty of soap and water

IF INHALED: Remove person to fresh air and keep comfortable for breathing

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Call a POISON CENTER/ doctor if you feel unwell

Rinse mouth

Take off contaminated clothing and wash it before reuse

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

3. Composition/Information on Ingredients

Component	CAS-No	Weight %	
3-Fluoro-2-(trifluoromethyl)benzonitrile	N/A	<=100	

4. First-aid measures

General Advice If symptoms persist, call a physician.

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 plenty of water for at least 15 minutes. If skin irritation persists,

call a physician.

Inhalation Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if

symptoms occur.

Ingestion Clean mouth with water and drink afterwards plenty of water. Get medical attention if

symptoms occur.

Most important symptoms/effects

Notes to Physician

None reasonably foreseeable.

Treat symptomatically

5. Fire-fighting measures

No information available **Unsuitable Extinguishing Media**

Flash Point No information available No information available Method -

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

Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products

None known.

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	Flammability	Instability	Physical hazards
2	1	0	-

Accidental release measures

Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust **Personal Precautions**

formation.

Environmental Precautions Should not be released into the environment. See Section 12 for additional Ecological

Information.

Methods for Containment and Clean Sweep up and shovel into suitable containers for disposal. Keep in suitable, closed Up

containers for disposal.

	7. Handling and storage
Handling	Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Avoid dust formation.

Keep containers tightly closed in a dry, cool and well-ventilated place. Storage.

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. Wherever possible, engineering control measures such as the isolation or enclosure of the

process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control

hazardous materials at source

Personal protective equipment

Eye Protection Goggles

Hand Protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

Glove material	Breakthrough time	Glove thickness	Glove comments
Nitrile rubber	See manufacturers	-	Splash protection only
Neoprene	recommendations		
Natural rubber			
PVC			

Inspect gloves before use. observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information) gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, gloves with care avoiding skin contamination.

Respiratory Protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. 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. To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained properly **Recommended Filter type:** Particulates filter conforming to EN 143

When RPE is used a face piece Fit Test should be conducted

Environmental exposure controls

No information available.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and after work.

9. Physical and chemical properties

Physical State Solid

Appearance No information available
Odor No information available

Odor Threshold
pH

No information available
No information available

Melting Point/Range

Boiling Point/Range

No data available
No information available

Flash Point

No information available
Evaporation Rate

Not applicable

Flammability (solid,gas)

No information available

Flammability (solid,gas)
Flammability or explosive limits

UpperNo data availableLowerNo data available

Vapor Pressure No information available

Vapor DensityNot applicableSpecific GravityNo information availableSolubilityNo information available

Partition coefficient; n-octanol/water

No data available

No information available

Autoignition TemperatureNo information availableDecomposition TemperatureNo information available

Viscosity Not applicable
Molecular Formula C8 H3 F4 N
Molecular Weight 189.11

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

Hazardous Decomposition Products None under normal use conditions

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous ReactionsNone 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

Sensitization No information available

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

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
3-Fluoro-2-(trifluorome	N/A	Not listed				
thyl)benzonitrile						

Mutagenic Effects No information available

Reproductive Effects No information available.

Developmental Effects No information available.

Teratogenicity No information available.

STOT - single exposure Respiratory system

STOT - repeated exposure None known

Aspiration hazard No information available

Symptoms / effects,both acute and No information available

delayed

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

UN-No UN3439

Proper Shipping Name
NITRILES, SOLID, TOXIC, N.O.S.

Technical Name
(3-Fluoro-2-(trifluoromethyl)benzonitrile)

Hazard Class 6.1 Packing Group

TDG

UN-No UN3439

Proper Shipping Name NITRILES, SOLID, TOXIC, N.O.S.

Hazard Class 6.1
Packing Group

IATA

UN-No UN3439

Proper Shipping Name NITRILES, SOLID, TOXIC, N.O.S.

Hazard Class 6.1 Packing Group III

IMDG/IMO

UN-No UN3439

Proper Shipping Name NITRILES, SOLID, TOXIC, N.O.S.

Hazard Class 6.1 Packing Group III

15. Regulatory information

International Inventories

Component	CAS-No	DSL	NDSL	TSCA	TSCA Inventory notification - Active-Inactive	EINECS	ELINCS	NLP
3-Fluoro-2-(trifluoromethyl)benzoni trile	N/A	-	-		-			-

Component	CAS-No	IECSC	KECL	ENCS	ISHL	TCSI	AICS	NZIoC	PICCS
3-Fluoro-2-(trifluoromethyl)benzoni	N/A	-	-	-	-	-	-	-	-
trile									

Legend:

X - Listed '-' - Not Listed

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

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

IECSC - Chinese Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

ENCS - Japanese Existing and New Chemical Substances

AICS - Australian Inventory of Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

Canada

SDS in compliance with provisions of information as set out in Canadian Standard - Part 4, Schedule 1 and 2 of the Hazardous Products Regulations (HPR) and meets the requirements of the HPR (Paragraph 13(1)(a) of the Hazardous Products Act (HPA)).

Other International Regulations

Authorisation/Restrictions according to EU REACH

Not applicable

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)
3-Fluoro-2-(trifluoromethyl)be nzonitrile	N/A	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)
3-Fluoro-2-(trifluoromethyl)be nzonitrile	N/A	Not applicable	Not applicable	Not applicable	Not applicable

16. Other information

Prepared By Product Safety Department

Email: chem.techinfo@thermofisher.com

www.thermofisher.com

Revision Date 31-March-2024 Print Date 31-March-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