

# SAFETY DATA SHEET

Revision Date 31-March-2024 Revision Number 3

### 1. Identification

Product Name 2-(Piperidin-4-yloxy)benzonitrile

Cat No.: H50961

CAS-No 900572-37-4

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 %
2-(Piperidin-4-yloxy)benzonitrile	900572-37-4	<=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

**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**

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

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

formation.

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

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

**Exposure Guidelines** 

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

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

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 Chunks

AppearanceNo information availableOdorNo information availableOdor ThresholdNo information availablepHNo information available

Melting Point/RangeNo data availableBoiling Point/RangeNo information availableFlash PointNo information availableEvaporation RateNot applicable

Flammability (solid, gas)

No information available

Flammability (solid,gas)

Flammability or explosive limits

Upper No data available
Lower No data available

Vapor Pressure
Vapor Density

No data available
No information available
Not applicable

Specific Gravity

No information available

Solubility

No information available

Partition coefficient: p-octanol/water

No data available

Partition coefficient; n-octanol/water

No data available

No information available

Autoignition TemperatureNo information availableDecomposition TemperatureNo information available

Viscosity

Molecular Formula

Molecular Weight

Not applicable
C12 H14 N2 O
Molecular Weight

202.26

# 10. Stability and reactivity

Reactive Hazard None known, based on information available

### 2-(Piperidin-4-yloxy)benzonitrile

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.

None under normal processing. **Hazardous Reactions** 

# 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

No information available Irritation

Sensitization No information available

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

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
2-(Piperidin-4-yloxy)be	900572-37-4	Not listed				
nzonitrile						

**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
(2-(Piperidin-4-yloxy)benzonitrile)

Hazard Class 6.1 Packing Group III

TDG

**UN-No** UN3439

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

Hazard Class 6.1
Packing Group

<u>IATA</u>

**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
2-(Piperidin-4-yloxy)benzonitrile	900572-37-4	-	-	i	•	-	ī	

Component	CAS-No	IECSC	KECL	ENCS	ISHL	TCSI	AICS	NZIoC	PICCS
2-(Piperidin-4-yloxy)benzonitrile	900572-37-4	ı	1	ı	ı	ı	-	ı	-

#### 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)
2-(Piperidin-4-yloxy)benzonitril e	900572-37-4	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-(Piperidin-4-yloxy)benzonitril e	900572-37-4	Not applicable	Not applicable	Not applicable	Not applicable

### 16. Other information

Prepared By Product Safety Department

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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**