

SAFETY DATA SHEET

Revision Date 24-December-2021 **Revision Number 4**

1. Identification

Product Name 4-Cyano-4-phenylpiperidine hydrochloride

AC110840000; AC110840025; AC110840100; AC110840500 Cat No.:

CAS-No

Synonyms 4-Phenyl-4-piperidinecarbonitrile hydrochloride

Recommended Use Laboratory chemicals.

Food, drug, pesticide or biocidal product use. Uses advised against

Details of the supplier of the safety data sheet

Company

Manufacturer Importer/Distributor

Acros Organics Fisher Scientific Company Fisher Scientific One Reagent Lane 112 Colonnade Road. One Reagent Lane Fair Lawn, NJ 07410 Fair Lawn, NJ 07410 Ottawa, ON K2E 7L6, Tel: (201) 796-7100

Canada

Tel: 1-800-234-7437

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

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 Category 3 Specific target organ toxicity (single exposure)

Label Elements

Signal Word Warning

Hazard Statements

Harmful if swallowed, in contact with skin or if inhaled

Causes skin irritation Causes serious eye 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

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 %	
4-Phenylpiperidine-4-carbonitrile hydrochloride	51304-58-6	99	

4. First-aid measures

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

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

clothes and shoes.

Inhalation Remove from exposure, lie down. Remove to fresh air.

Ingestion Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Drink

plenty of water. If possible drink milk afterwards.

Most important symptoms/effects

Notes to Physician

No information available. Treat symptomatically

5. Fire-fighting measures

Suitable Extinguishing Media Water spray. Carbon dioxide (CO₂). Dry chemical. Alcohol resistant foam.

4-Cyano-4-phenylpiperidine hydrochloride

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

HealthFlammabilityInstabilityPhysical hazards210N/A

6. Accidental release measures

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

Environmental Precautions See Section 12 for additional Ecological Information.

Methods for Containment and Clean Sweep up and shovel into suitable containers for disposal.

Up

7. Handling and storage

Handling Ensure adequate ventilation

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

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.

Engineering Measures

Ensure adequate ventilation, especially in confined areas.

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 Wear safety glasses with side shields (or goggles) 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
	recommendations		

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

Wear a NIOSH/MSHA or European Standard EN 149 approved full-facepiece airline respirator in the positive pressure mode with emergency escape provisions.

To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained properly

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 Powder Solid **Appearance** Off-white Odorless Odor

Odor Threshold No information available No information available

210 - 214 °C / 410 - 417.2 °F **Melting Point/Range**

No information available **Boiling Point/Range** Flash Point No information available **Evaporation Rate** No information available Flammability (solid, gas) No information available

Flammability or explosive limits

Upper No data available Lower No data available

No information available **Vapor Pressure** No information available **Vapor Density** No information available **Specific Gravity** Solubility No information available No data available

Partition coefficient; n-octanol/water

No information available **Autoignition Temperature Decomposition Temperature** No information available **Viscosity** No information available

Molecular Formula C12 H14 N2 . H CI

Molecular Weight 222.72

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 No information available.

None under normal processing. **Hazardous Reactions**

11. Toxicological information

Acute Toxicity

Product Information

No acute toxicity information is available for this product

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
4-Phenylpiperidine-4-c	51304-58-6	Not listed				
arbonitrile						
hvdrochloride						

Mutagenic Effects No information available

No information available. Reproductive Effects

Developmental Effects No information available.

Teratogenicity No information available.

STOT - single exposure None known STOT - repeated exposure None known

No information available **Aspiration hazard**

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

Chemical waste generators must determine whether a discarded chemical is classified as a **Waste Disposal Methods**

hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

14. Transport information

UN-No UN2811

4-Cyano-4-phenylpiperidine hydrochloride

Hazard Class 6.1
Packing Group

TDG

UN-No UN2811
Hazard Class 6.1
Packing Group III

<u>IATA</u>

UN-No UN2811

Proper Shipping Name TOXIC SOLID, ORGANIC, N.O.S.*

Hazard Class 6.1
Packing Group

IMDG/IMO

UN-No UN2811

Proper Shipping Name Toxic solid, organic, 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
4-Phenylpiperidine-4-carbonitrile hydrochloride	51304-58-6	=	-	-	-	257-124-5	-	-

Component	CAS-No	IECSC	KECL	ENCS	ISHL	TCSI	AICS	NZIoC	PICCS
4-Phenylpiperidine-4-carbonitrile	51304-58-6	-	-	-	-	X	-	-	-
hydrochloride									

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

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-Phenylpiperidine-4-carbonitr ile hydrochloride	51304-58-6	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)
4-Phenylpiperidine-4-carbonitr ile hydrochloride	51304-58-6	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 24-December-2021 Print Date 24-December-2021

Revision Summary

This document has been updated to comply with the requirements of WHMIS 2015 to align

with the Globally Harmonised System (GHS) for the Classification and Labelling of

Chemicals.

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