

# **SAFETY DATA SHEET**

Creation Date 16-November-2018 Revision Date 02-April-2024 Revision Number 3

1. Identification

Product Name (S)-(-)-3-Dimethylaminopyrrolidine dihydrochloride, 97%

Cat No.: H30661

**CAS-No** 144043-20-9

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)

Skin Corrosion/IrritationCategory 2Serious Eye Damage/Eye IrritationCategory 2Specific target organ toxicity (single exposure)Category 3

Target Organs - Respiratory system.

**Label Elements** 

## Signal Word

Warning

# **Hazard Statements**

Causes skin irritation
Causes serious eye irritation
May cause respiratory irritation



## **Precautionary Statements**

## Prevention

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

Wash face, hands and any exposed skin thoroughly after handling

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

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 %
(S)-(-)-3-Dimethylaminopyrrolidine dihydrochloride	144043-20-9	<=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

## Fire-fighting measures

Unsuitable Extinguishing Media No information available

Flash Point Not applicable

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**

Carbon monoxide (CO). Carbon dioxide (CO2). Nitrogen oxides (NOx). Hydrogen chloride. Hydrogen cyanide (hydrocyanic acid).

## **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

Instability Health **Flammability** Physical hazards 2 0 0 N/A

## 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	7. H	Handling	and	storage

Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not Handling

get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Avoid dust formation.

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

Materials. Water. 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.

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.

Г	Glove material	Breakthrough time	Glove thickness	Glove comments
	Natural rubber	See manufacturers	-	

Nitrile rubber Neoprene **PVC** 

recommendations

Splash protection only

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** Yellow

No information available Odor **Odor Threshold** No information available

Not applicable Hq

176 - 181 °C / 348.8 - 357.8 °F Melting Point/Range

**Boiling Point/Range** No information available Flash Point Not applicable

**Evaporation Rate** Not applicable No information available Flammability (solid,gas)

Flammability or explosive limits

Upper No data available Lower No data available **Vapor Pressure** No information available

Not applicable **Vapor Density** 

**Specific Gravity** No information available No information available Solubility No data available Partition coefficient; n-octanol/water **Autoignition Temperature** No information available

**Decomposition Temperature** No information available **Viscosity** Not applicable C6H14N2•2HCI Molecular Formula

187.11 **Molecular Weight** 

## 10. Stability and reactivity

**Reactive Hazard** None known, based on information available

Stable under normal conditions. Stability

# (S)-(-)-3-Dimethylaminopyrrolidine dihydrochloride,

Conditions to Avoid Incompatible products.

Incompatible Materials Water, Oxidizing agent

Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO2), Nitrogen oxides (NOx), Hydrogen chloride,

Hydrogen cyanide (hydrocyanic acid)

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

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
(S)-(-)-3-Dimethylamin	144043-20-9	Not listed				
opyrrolidine						
dihydrochloride						

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.

DOTNot regulatedTDGNot regulatedIATANot regulatedIMDG/IMONot regulated

# 15. Regulatory information

#### International Inventories

Component	CAS-No	DSL	NDSL	TSCA	TSCA Inventory notification - Active-Inactive	EINECS	ELINCS	NLP
(S)-(-)-3-Dimethylaminopyrrolidine dihydrochloride	144043-20-9	-	Ī	-	-	-	-	•

Component	CAS-No	IECSC	KECL	ENCS	ISHL	TCSI	AICS	NZIoC	PICCS
(S)-(-)-3-Dimethylaminopyrrolidine	144043-20-9	-	-	-	-	-	-	-	-
dihydrochloride									

#### 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)
(S)-(-)-3-Dimethylaminopyrroli dine dihydrochloride	144043-20-9	Not applicable	Not applicable	Not applicable	Not applicable

Component	CAS-No	Seveso III Directive (2012/18/EC) -	Seveso III Directive (2012/18/EC) -	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
		Qualifying Quantities	Qualifying Quantities	. ,	,

# (S)-(-)-3-Dimethylaminopyrrolidine dihydrochloride, 97%

		for Major Accident Notification	for Safety Report Requirements		
(S)-(-)-3-Dimethylaminopyrroli dine dihydrochloride	144043-20-9	Not applicable	Not applicable	Not applicable	Not applicable

# 16. Other information

Prepared By Product Safety Department

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www.thermofisher.com

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 16-November-2018

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 02-April-2024

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**Revision Summary** New emergency telephone response service provider.

#### **Disclaimer**

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**End of SDS**