

Part of Thermo Fisher Scientific

SAFETY DATA SHEET

Revision Date 10-Feb-2015 Revision Number 1

1. Identification

Product Name 1-Benzyl-4-cyano-4-(1`-piperidino)piperidine

Cat No.: AC325240000; AC325240050; AC325240250

Synonyms 1`-(Phenylmethyl)-(1,4`-bipiperidine)-4`-carbonitrile

Recommended Use Laboratory chemicals.

Uses advised against No Information available

Details of the supplier of the safety data sheet

Company Entity / Business Name

Fisher Scientific Acros Organics
One Reagent Lane One Reagent Lane

Fair Lawn, NJ 07410 Fair Lawn, NJ 07410 Tel: (201) 796-7100

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 Category 3

Label Elements

Signal Word Danger

ū

Hazard Statements



Precautionary Statements

Prevention

Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product

Revision Date 10-Feb-2015

Ingestion

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Rinse mouth Storage

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

Component	CAS-No	Weight %		
1'-(Phenylmethyl)-[1,4'-bipiperidine]-4'-carbonitrile	84254-97-7	98		

4. First-aid measures

Immediate medical attention is required. Rinse immediately with plenty of water, also under **Eye Contact**

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. Immediate medical attention is required.

Remove from exposure, lie down. Move to fresh air. If breathing is difficult, give oxygen. If Inhalation

not breathing, give artificial respiration. Obtain medical attention.

Ingestion Call a physician immediately. Clean mouth with water.

Most important symptoms/effects

Notes to Physician

No information available. Treat symptomatically

Fire-fighting measures

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

Unsuitable Extinguishing Media No information available

Flash Point No information available No information available Method -

Autoignition Temperature

Explosion Limits

270 °C / 518 °F

No data available Upper 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)

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 **Physical hazards Flammability** Instability 3 N/A 0 0

6. Accidental release measures

Ensure adequate ventilation. Use personal protective equipment. **Personal Precautions**

See Section 12 for additional ecological information. **Environmental Precautions**

Methods for Containment and Clean Sweep up or vacuum up spillage and collect in suitable container for disposal.

Up

Handling and storage

Do not breathe dust. Do not breathe vapors or spray mist. Do not get in eyes, on skin, or on Handling

clothing. Use only in area provided with appropriate exhaust ventilation.

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

8. Exposure controls / personal protection

This product does not contain any hazardous materials with occupational exposure limits **Exposure Guidelines**

established by the region specific regulatory bodies.

Engineering Measures Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

Eye/face Protection Wear appropriate protective eyeglasses or chemical safety goggles as described by

OSHA's eve 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.

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard **Respiratory Protection**

> 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.

Handle in accordance with good industrial hygiene and safety practice. **Hygiene Measures**

9. Physical and chemical properties

Powder Solid **Physical State Appearance** Light yellow

Odor No information available

Odor Threshold No information available No information available

103 - 106 °C / 217.4 - 222.8 °F **Melting Point/Range**

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

Flammability or explosive limits

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

No information available **Vapor Density** No information available **Relative Density** No information available No information available Solubility Partition coefficient: n-octanol/water No data available

270 °C / 518 °F **Autoignition Temperature Decomposition Temperature** No information available No information available **Viscosity**

1-Benzyl-4-cyano-4-(1`-piperidino)piperidine

Revision Date 10-Feb-2015

Molecular Formula C18 H25 N3 **Molecular Weight** 283.42

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 Carbon monoxide (CO), Carbon dioxide (CO2)

Hazardous Polymerization No information available.

Hazardous Reactions None under normal processing.

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

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
1'-(Phenylmethyl)-[1,4' -bipiperidine]-4'-carbon		Not listed				
itrile						

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

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

Revision Date 10-Feb-2015

Do not empty into drains.

Persistence and Degradability No information available **Bioaccumulation/ Accumulation** No information available.

No information available. **Mobility**

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

DOT

UN-No UN2811 **Hazard Class** 6.1 **Packing Group** Ш

TDG

UN2811 **UN-No Hazard Class** 6.1 Ш **Packing Group**

<u>IATA</u>

UN-No 2811

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

Hazard Class 6.1 **Packing Group**

IMDG/IMO

UN-No 2811

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

Hazard Class Packing Group Ш

Regulatory information

International Inventories

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	IECSC	KECL
1'-(Phenylmethyl)-[1,4'-bipipe	-	-	-	282-544-0	-		-	-	-	-	-
ridine]-4'-carbonitrile											

Legend:

X - Listed

- E Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.
- F Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.
- N Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.
- P Indicates a commenced PMN substance
- R Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.
- S Indicates a substance that is identified in a proposed or final Significant New Use Rule
- T Indicates a substance that is the subject of a Section 4 test rule under TSCA.
- XU Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).
- Y1 Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.
- Y2 Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

U.S. Federal Regulations

TSCA 12(b) Not applicable **SARA 313** Not applicable

1-Benzyl-4-cyano-4-(1`-piperidino)piperidine

Revision Date 10-Feb-2015

SARA 311/312 Hazardous Categorization

Acute Health Hazard Yes **Chronic Health Hazard** No **Fire Hazard** No **Sudden Release of Pressure Hazard** No **Reactive Hazard** No

Clean Water Act Not applicable

Clean Air Act Not applicable

OSHA Occupational Safety and Health Administration

Not applicable

CERCLA

Not applicable

This product does not contain any Proposition 65 chemicals California Proposition 65

State Right-to-Know Not applicable

U.S. Department of Transportation

Reportable Quantity (RQ): Ν **DOT Marine Pollutant** Ν **DOT Severe Marine Pollutant** Ν

U.S. Department of Homeland Security

This product does not contain any DHS chemicals.

Other International Regulations

No information available Mexico - Grade

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR

WHMIS Hazard Class D1A Very toxic materials



16. Other information

Regulatory Affairs Prepared By

Thermo Fisher Scientific

Email: EMSDS.RA@thermofisher.com

Revision Date 10-Feb-2015 **Print Date** 10-Feb-2015

Revision Summary 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 on 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 guide for safe handling, use, processing, storage,

Revision Date 10-Feb-2015

transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of SDS