

3-Methylpiperidine Safety Data Sheet

According to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

Date of Compilation : November 6, 2009

Date of Issue : March 12, 2024

Revision due date : February 2027

Due Date of Revision : 0199Gj Ghs04 Div. 3 sds 3-Methylpiperidine

Version Number : 04

Supersedes date : January 02, 2024

Supersedes version : 0199Gj Ghs03 Div. 3 sds 3-Methylpiperidine



Safety Data Sheet

According to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/ MIXTURE AND OF THE COMPANY/ UNDERTAKING

1.1. Product identifier

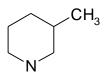
PRODUCT NAME : 3-Methylpiperidine CAS RN : 626-56-2

EC# : 210-953-6 SYNONYMS : 3-Methylpiperidine, Piperidine, 3-methyl-, beta.-pipecoline, 3-pipecoline

TECHNICAL NAME : 3-Methylpiperidine, Piperidine, 3-methyl-

MOLECULAR FORMULA : C₆H₁₃N

STRUCTURAL FORMULA



1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

3-Methylpiperidine is used as an intermediate in the synthesis of pharmaceutical industry.

Uses advised against: None

1.3. Details of the supplier of the safety data sheet

Jubilant Ingrevia Limited

FACTORY & REGISTERED OFFICE: Jubilant Ingrevia Limited, Bhartiagram, Gajraula, District: Amroha, Uttar Pradesh-244223, India. T: +91-5924-267437, +91-5924-267438.

HEAD OFFICE: Jubilant Ingrevia Limited, Plot 1-A, Sector 16-A, Institutional Area, Noida, Uttar Pradesh, 201301 - India T +91-120-4361000 - F +91-120-4234881 / 84 / 85 / 87 / 95 / 96 support@jubl.com - www.jubilantingrevia.com

1.4. Emergency telephone number

For Chemical Emergency ONLY (in the case of fire, leak, spill, exposure or accident) Call

Chemtrec: 1-800-424-9300 (US), 1-703-527-3887 (Outside U.S.)

Chemtrec (India): 000-800-100-7141

For ALL other emergencies call Emergency Control Room Gajraula at 99970 22412

SECTION 2: HAZARD(S) IDENTIFICATION

2.1. Classification of the substance or mixture

GHS US Classification

Flammable Liquid: Category 2 H225 Highly flammable liquid and vapour. Acute Toxicity (Oral): Category 4 H302 Harmful if swallowed Skin Corrosion/irritation: Category 2 H315 Causes skin irritation. Eye damage/irritation: Category 2 H319 Causes serious eye irritation. Specific Target organ Toxicity: Category 3 H335 May cause respiratory irritation. (Single Exposure)

2.2. Label Elements





Hazard Pictogram: GHS 02, GHS 07

Signal Word: Danger! GHS 02: Flame GHS 07: Exclamation Mark



Safety Data Sheet

According to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

HAZARD AND PRECAUTIONARY STATEMENTS:

HAZARD STATEMENTS

- H225: Highly flammable liquid and vapor
- H302: Harmful if swallowed.
- H315: Causes skin irritation.
- H319: Causes serious eye irritation.
- H335: May cause respiratory irritation.

PRECAUTIONARY STATEMENTS

- P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
- P233: Keep container tightly closed.
- P264: Wash hands, eyes and face thoroughly after handling.
- P280: Wear protective gloves/clothing and eye/face protection.
- P270: Do not eat, drink or smoke when using this product.
- P271: Use only outdoors or in a well-ventilated area.
- P261: Avoid breathing dust/fume/gas/mist/vapors/spray.
- P301+P312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
- P302 + P352: IF ON SKIN: Wash with plenty of soap and water.
- P303 + P361 + P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P330: Rinse mouth.
- P332 + P313: If skin irritation occurs: Get medical advice/attention.
- P362: Take off contaminated clothing and wash before reuse.
- P305 + P351 + P338: IF IN EYES, Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rising.
- P337 + P313: If eye irritation persists: Get medical advice/attention.
- P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P370 + P378: In case of fire: Use water for extinction.
- P403+P233: Store in a well-ventilated place. Keep container tightly closed.
- P403 + P235: Store in a well-ventilated place. Keep cool.
- P501: Dispose of contents/container to local/regional/national/international regulations.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical	CAS#	EC#	Purity	GHS US Classification
3-Methylpiperidine	626-56-2	210-953-6	> 98.5 %	Flammable liquid: Category 2 Acute Toxicity(Oral): Category 4 Skin Corrosion/irritation: Category 2 Eye damage/irritation: Category 2 Specific Target organ Toxicity (SE): Category 3

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

- Consult a physician. Show this safety data sheet to the doctor in attendance.
- Eyes: If in eyes rinse cautiously with water for at least 15 minutes. Remove contact lenses if easy to do so. Continue rinsing. Seek
 medical attention.
- **Skin:** Immediately take off all contaminated clothing. Wash thoroughly with water for at least 15 minutes. Wash contaminated clothes before reuse. Seek immediate medical attention.
- Inhalation: Remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if you feel unwell. Monitor for respiratory distress. Apply artificial respiration if not breathing. Do not use mouth-to-mouth methods if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical
- Ingestion: If swallowed call a poison center if you feel unwell. Rinse mouth. Do NOT induce vomiting by use of emetics. Seek medical attention.



Safety Data Sheet

According to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

4.2. Most important symptoms and effects, both acute and delayed

Acute effects:

 3-Methylpiperidine is Harmful if swallowed, irritating to skin, eyes and may cause irritation to mucous membrane and upper respiratory tract.

Chronic effects:

• To the best of our knowledge, the chronic health effects of this product have not been fully investigated.

4.3. Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing media

• Suitable extinguishing media: Small (incipient) fires must be extinguished with alcohol resistant foam, dry chemical powder or carbon dioxide. Large amounts of water are ineffective. Cool containers with large amounts of water.

5.2. Special hazards arising from the substance or mixture

· When heated to decomposition it may emit toxic vapors of nitrogen oxides, carbon monoxide and carbon dioxide.

5.3. Advice for firefighters

- Evacuate the area and fight fires from a safe distance.
- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions or as per locally valid procedures.
- Fire fighters must wear Self Contained Breathing Apparatus (SCBA) and full protective clothing. The chemical is harmful in contact with
- Report any run-off of fire waters contaminated with this chemical as per local and federal procedures applicable.

5.4. Further information

No data available

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

- Spill should be handled by trained cleaning personnel properly equipped with respiratory and eye protection.
- Avoid contact with skin and eyes.
- Wear protective clothing, boots, impervious gloves and safety glasses.
- Alert Emergency Responders and tell them location and nature of hazard.

6.2. Environmental precautions

- Place waste in an appropriately labeled, sealed container for disposal. Care should be taken to avoid environmental release.
- Prevent, by any means available, spillage from entering drains or water and watercourses.
- Collect recoverable product into labeled containers for recycling, recovery or disposal.

6.3. Methods and materials for containment and cleaning up

- Wipe up spillage or collect spillage using a high-efficiency vacuum cleaner. Avoid breathing dust.
- Place spillage in appropriately labeled container for disposal. Wash spill site.
- Contain spill with sand, earth or vermiculite.
- Spread area with lime or absorbent material, and leave for at least 1 hour before washing.
- · Clean up all tools and equipment.
- Inform authorities in event of contamination of any public sewers, drains or water bodies.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

- Handle in accordance with good industrial hygiene and safety procedures. Avoid Prolonged or repeated exposure. Take precautionary measures against electrostatic discharge.
- Material should be handled in a laboratory hood whenever against fire and explosion possible.
- Avoid contact with incompatible materials.
- When handling, DO NOT eat, drink or smoke

7.2 Conditions for safe storage, including any incompatibilities

- Store in a cool, dry and well-ventilated place.
- Keep container tightly closed.
- Keep away from sources of ignition.



Safety Data Sheet

According to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parameters

Exposure Limits Values

Chemical name	STEL (ppm)	NIOSH	OSHA	ACGIH
3-Methylpiperidine	None available	None available	None available	None available

Exposure Limits (International):

Not available.

8.2. Exposure controls

Appropriate Engineering Controls:

- Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
- Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations below their respective occupational
 exposure limits.
- Local ventilation is usually preferred.
- Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protective equipment

- Hand Protection: Wear suitable gloves resistant to chemical penetration
- Eye Protection: Chemical safety goggles
- Body Protection: Wear suitable protective clothing.
- Respiratory protection: Where respirators are deemed necessary to reduce or control occupational exposure, use NIOSH-approved respiratory protection and have an effective respirator program in place.

Additional Information

- Only use protective equipment in accordance with national/international regulations. Follow the national regulation about wearing personal protective equipment and the warranty given.
- Exposure may occur during manufacture, transportation and industrial use. The likely primary routes of human exposure to choline chloride are skin contact and inhalation at the work place.
- Worker exposure is limited by enclosed systems, industrial hygiene controls and personal protective measures (protective gloves, safety glasses with side-shields, respiratory protection if ventilation is inadequate).

General Hygiene and general comments:

- Wash hands and face after working with the substance.
- Under no circumstances eat or drink at the workplace.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Sr.No.	Parameter	Typical value
1.	Appearance	Colorless to slight yellow liquid.
2.	Molecular weight	99.17
3.	Odor	Amine Like Odor
4.	Odor Threshold	Not Available
5.	рН	Not determined.
6.	Melting point/Freezing point	-24 °C
7.	Boiling Point	124-125 °C (255-257 °F)
8.	Flash point	8 °C
9.	Evaporation rate (n-BuAc=1)	Not Applicable
10.	Flammability	Flammable Liquid
11.	Upper/lower flammability or Explosive limits	Product is not explosive. However, formation of explosive air/vapor mixtures is possible
12.	Vapor pressure	75 hPa at 50 °C



Safety Data Sheet

According to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

13.	Vapor density (air=1)	3.42
14.	Relative Density	0.845 g/cm3 at 25 °C
15.	Solubility	Fully miscible in water. Soluble in polar solvents like methanol ,ethanol etc
16.	Partition coefficient : n-(Octonol / water)	1.61
17.	Auto-ignition temperature	No data available
18.	Decomposition temperature	No data available
19.	Viscosity	Not Available
20.	Explosive property	No

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

• Stable under normal temperatures and pressures.

10.2. Chemical stability

• Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Hazardous Polymerization: None under normal processing.

10.4. Conditions to avoid

• Spark, Open flame, Static discharge. Extremes of temperature and direct sunlight.

10.5. Incompatible materials

Heat, flames and sparks. Acids, Acid chlorides, Acid anhydrides, Strong oxidizing agents, Carbon dioxide (CO2)

10.6. Hazardous decomposition products

- Other decomposition products Thermal decomposition may produce Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO2), Cyanides, Thermal decomposition can lead to release of irritating gases and vapors.
- In the event of fire: see section 5

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity

 3-Methylpiperidine is Harmful if swallowed, irritating to skin, eyes and may cause irritation to mucous membrane and upper respiratory tract

RTECS#: Unlisted

LD50 (Oral) Rat- 530.81 mg/kg (Predicted Oral rat LD50 from consensus method)

Skin corrosion/irritation : Causes skin irritation.

Eye damage/irritation : Causes eye irritation.

Respiratory or skin sensitization : No data available Germ cell Mutagenicity : No data Available

Carcinogenicity : Not listed by IARC and OSHA.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen

by IARC

Reproductive toxicity : According to the information presently available this product

has not been tested for its ability to affect reproduction.

STOT-single exposure : May cause irritation to respiratory system.



Safety Data Sheet

According to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

STOT- repeated exposure : No data available.

Aspiration Hazards : No data available.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

 Short term toxicity to aquatic invertebrates: LC50 (96 hrs) Fathead minnow- 259.71 mg/l (Predicted)

Based on this value it can be concluded that the substance 3-Methylpiperidine is considered to be not toxic to aquatic environment.

12.2. Persistence and degradability

· Not readily biodegradable.

12.3. Bio accumulative potential

3-Methylpiperidine (626-56-2)		
Bio concentration factor	5.328	
Log Kow	1.61 (Estimated)	

Based on the Log Kow and Bioconcentration factor value it is not expected to have a potential to concentrate in fatty tissue of fish and aquatic organisms relative to its surroundings.

12.4. Mobility in soil

3-Methylpiperidine (626-56-2)		
Log Koc	1.94 (estimated). Low sorption	
Henry's Constant	7.22E-006 atm/m ³ mole (Estimated)	
Log Kow	1.61. Low potential to bio accumulate.	

Will likely be mobile in the environment due to its water solubility

12.5 Other adverse effects

Environment Fate

Based on the environmental modeling, this material has a negligible potential to get absorbed in the organic matter of soil and is non-volatile from water bodies. Since this is an estimated result it is recommended that the material should not be disposed into the environment. The material should never be disposed into the sewage.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting, as this material is highly flammable.
 Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging

• Dispose of as unused product.

SECTION 14: TRANSPORT INFORMATION

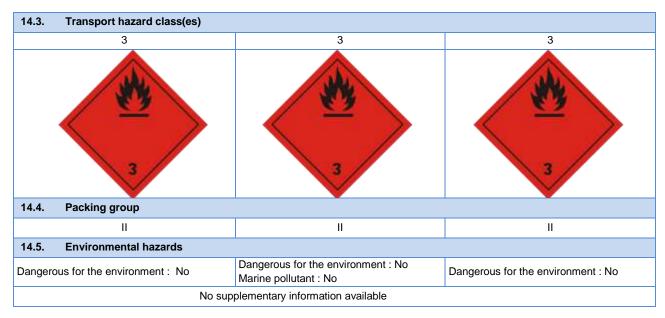
 This substance is not considered to be Hazardous for transport by Air/Rail/Road and Sea and thus not regulated by ADR/RID IATA/ ICAO/ IMO/ IMDG.

AD	R / RID	IMDG	IATA	
14.1.	UN number			
	1993	1993	1993	
14.2.	UN proper shipping name			
FLAMMABLE LIQUID, N.O.S. (3- Methylpiperidine)		FLAMMABLE LIQUID, N.O.S. (3- Flammable liquid, n.o.: Methylpiperidine) Methylpiperidine)		



Safety Data Sheet

According to the federal final rule of hazard communication revised on 2012 (HazCom 2012)



SECTION 15: REGULATORY INFORMATION

Classification as per CLP Regulation 1272/2008:

- Hazards Class and Category: Flammable liquid. Cat 2; Acute Toxixity (Oral) cat 4, Skin Irrit.cat.2, Eye irrit.cat.2, STOT SE cat 3.
- Hazard Statements: H225, H302; H315; H319; H335.

Chemical Inventory Lists:	Status
TSCA:	Listed
EC/ List No.	210-953-6
Canada(DSL/NDSL):	Listed (DSL)
Korea:	Not listed
Australia:	Listed
Taiwan	Listed
New Zealand	Not Listed (NZIoC)
Philippines	Not Listed (PICCS)
China: IECSC	Not listed
Japan	Listed
Catalog of Hazardous Chemicals in China (2022)	Listed

US information

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):

3-Methylpiperidine is not listed

SARA 302/304: 3-Methylpiperidine is not listed
SARA 311/312: See section 2 for more information
California Prop. 65: 3-Methylpiperidine is not listed
CAA (Clean Air Act): 3-Methylpiperidine is not listed
CWA (Clean Water Act): 3-Methylpiperidine is not listed

EU Information

Water hazard class (WGK): WGK 3 (Severely hazardous to water)



Safety Data Sheet

According to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No. 1907/2006: 3-Methylpiperidine is not listed

SECTION 16: OTHER INFORMATION

a) Compilation information of safety data sheet

Date of compilation : November 6, 2009 Chemical : 3-Methylpiperidine

CAS # : 626-56-2

File Name : 0199Gj Ghs04 Div. 3 sds 3-Methylpiperidine

Version Number : 04

Date of Issue of SDS : March 12, 2024
Revision Due Date : February, 2027
Supersedes date : January 02, 2024

Supersedes version : 0199Gj Ghs03 Div. 3 sds 3-Methylpiperidine

b) A key or legend to aberrations and acronyms used in the safety data sheet

- PBT =Persistent Bio accumulative and Toxic.
- vPvB= Very Persistent and Very Bio accumulative.
- SCBA= Self Contained Breathing Apparatus.
- NIOSH REL= National Institute for Occupational Safety and Health Recommended Exposure Limit.
- OSHA PEL=Occupational Safety and Health Administration Permissible Exposure Limit.
- OELTWA= Occupational Exposure Limit Time Weighted Averages.
- RTECS= Registry of Toxic Effects of Chemical Substances.
- NTP=National Toxicology Program.
- IARC= International Agency for Research on Cancer.
- EPA=Environmental Protection Agency.
- TSCA= Toxic Substances Control Act.
- SARA= Superfund Amendments and Reauthorization Act.
- WHIMS= Workplace Hazardous Materials Information System.
- DSL/NDSL= Domestic/Non-Domestic Substances List.
- BCF = Bio Concentration Factor.
- TLV = Threshold Limit Value.
- ACGIH = American Conference of Governmental Industrial Hygienists.
- REACH = Registration, Evaluation .Authorization and Restriction of Chemicals.
- CLP = Classification, Labeling and Packaging.
- LD / LC = Lethal Doses / Lethal Concentration.
- GHS = Globally Harmonized System.
- ADR = Accord European relative au transport international de merchandises.
- IMDG-Code = International Maritime Code for Dangerous Goods.
- EmS = Emergency measures on Sea.
- ICAO = International Civil Aviation Organization.
- IATA/DGR= International Air Transport Association/Dangerous Goods Regulation.

c) Key Literature reference and sources for data

Biographical reference and data sources

- Globally Harmonized System of Classification and Labelling of Chemicals.
- CLP REG (regulation) (EC) no. 1272/2008, last modification by regulation (EC) no. 790/2009
- Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EC) No. 2020/878

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

(End of Safety Data Sheet)