



3,5-Dimethylpiperidine

Safety Data Sheet

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

Date of Compilation : May 04, 2012

Date of Revision : February 26, 2024

Due Date of Revision : January 2027

Revision Number : 11

Version Number : 0027Bh Ghs11 Div.3 sds 3,5-Dimethylpiperidine

Supersedes date : January 02, 2024

Supersedes version : 0027Bh Ghs10 Div.3 sds 3,5-Dimethylpiperidine

3,5-Dimethylpiperidine

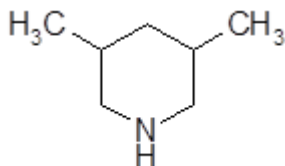
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SECTION 1: Identification

1.1. Identification

PRODUCT NAME	: 3,5-Dimethylpiperidine
CAS RN	: 35794-11-7
EC#	: 252-730-6
SYNONYMS	: Piperidine, 3,5-dimethyl-
SYSTEMATIC NAME	: 3,5-Dimethylpiperidine; Piperidine, 3,5-dimethyl-
MOLECULAR FORMULA	: C ₇ H ₁₅ N
STRUCTURAL FORMULA	



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

- 3,5-Dimethylpiperidine is used as an intermediate in the manufacturing of active pharmaceutical ingredients

1.3. Details of the supplier of the safety data sheet

Jubilant Ingrevia Limited

FACTORY OFFICE: Jubilant Ingrevia Limited, Unit-1, Plot No P1-L1 within Jubilant Sector Specific SEZ for Chemicals at Plot No-5, Vilayat GIDC, Tal-Vagra, Dist-Bharuch, Tel: 02641-281500, 281507, Fax: 02641-281515

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 (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

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS CLASSIFICATION

Flammable Liquid: category 3

Acute Toxicity-Oral-Category 4

Skin corrosion / irritant: Category 2

Serious eye damage/eye irritant: Category 2A

Specific target organ toxicity – single: Category 3



Hazard Pictogram: GHS 02; GHS 07

Signal Word: Warning!

HAZARD AND PRECAUTIONARY STATEMENTS:

HAZARD STATEMENTS

- H226: 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.
- P243: Take precautionary measures against static discharge.
- P261: Avoid breathing dust/fume/gas/mist/vapors/spray.



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- P264: Wash hands and face thoroughly after handling.
- P271: Use only outdoors or in a well-ventilated area.
- P280: Wear protective gloves/protective clothing/eye protection/face protection.
- P303+P361+P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P370+P378: In case of fire: Use water for extinction.
- P302+P352: IF ON SKIN: Wash with plenty of soap and water.
- 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 rinsing.
- P337+P313: If eye irritation persists: Get medical advice/attention.
- P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P312: Call a POISON CENTER or doctor/physician if you feel unwell.
- P403+233: Store in a well ventilated place. Keep container tightly closed.
- P405: Store locked up
- P501: Dispose of contents/container to local/regional/national/international regulations.

SECTION 3 : Composition/information on ingredients

Substance	CAS No.	Purity	GHS-US Classification
3,5-Dimethylpiperidine	35794-11-7	~98%	Flammable liquid: Category 3 H226 Skin corrosion / irritant: Category 2 H315 Serious eye damage/eye irritation: Category 2A H319 Specific target organ toxicity: Category 3 H335 (After single exposure)

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures.

- **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 device. Toxic vapors may be released on thermal decomposition including nitrogen oxides, carbon monoxide and cyanide.
- **Ingestion:** If swallowed call a poison center if you feel unwell. Rinse mouth. Do NOT induce vomiting by use of emetics. Seek medical attention.

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

Acute effects:

- 3, 5-Dimethylpiperidine is irritating to eyes, respiratory system and skin.

Chronic effects:

- To the best of our knowledge chronic effects of this compound have not been fully investigated.

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

- Treat symptomatically.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing media.

- **Appropriate extinguishing media:** Dry chemical powder, carbon dioxide, and alcohol resistant foam. Do not use water jet or fog (spray) to extinguish. Water can be effective in cooling down the fire-exposed containers and knocking down the vapours. Water jets may be used to flush spills away and dilute the same to non-flammable mixtures fog or alcohol-resistant foam by directing streams to the periphery of the fires to prevent spread.

5.2. Special hazards arising from the substance or mixture.

- Toxic vapors may be released on thermal decomposition including nitrogen oxides, carbon monoxide and carbon dioxide.
- High vapor concentration may result in an explosion hazard.
- Vapors are heavier than air. May travel considerable distance from source and flashback.



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5.3. Advice for firefighters

- This material is extremely hazardous to health, but fire fighters may enter areas with extreme care.
- Full protective clothing including a self-contained breathing apparatus, coat, pants, gloves, boots and bands around legs, arms and waist should be provided. No skin surface should be exposed.
- 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).
- Report any run-off of firewater's contaminated with this chemical as per local and federal procedures applicable.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures.

- Wear protective clothing, full boots, impervious gloves, safety glasses and Self Contained Breathing Apparatus (SCBA), as may be deemed appropriate.
- Avoid breathing vapors and contact with skin and eyes.
- Shut off leak source if possible.
- Shut off all possible sources of ignition.
- Wipe up.
- Decontaminate all equipment.
- Wear protective clothing, full boots, impervious gloves, safety glasses and Self Contained Breathing Apparatus (SCBA), as may be deemed appropriate.
- Alert Emergency Responders and tell them location and nature of hazard.
- Shut off all possible sources of ignition and increase ventilation.
- Stop leaks if possible.
- Clean up all spills immediately following relevant Standard Operating Procedures.
- Avoid breathing vapors and contact with skin and eyes.

6.2. Environmental precautions.

- Clean up all spills immediately following relevant Standard Operating Procedures.
- Inform authorities in event of contamination of any public sewers, drains or water bodies.
- Wipe up.
- Prevent, by any means available, spillage from entering drains or water and watercourses.
- Collect recoverable product into labeled containers for recycling, recovery or disposal.
- Contain spill with sand, earth or vermiculite.
- Spread area with lime or absorbent material, and leave for at least 1 hour before washing.

6.3. Methods and material for containment and cleaning up.

- Clean up all tools and equipment.
- Decontaminate all equipment.

6.4. Reference to other sections.

- For more information please refer to section 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

- Do not breathe vapor or mist.
- Wear protective gloves/clothing and eye/face protection.
- Wash thoroughly after handling.
- Ground and secure containers when dispensing or pouring product.
- Avoid contact with incompatible materials.
- When handling, DO NOT eat, drink or smoke.
- Launder contaminated clothing before re-use.
- If on skin or hair, IMMEDIATELY remove all contaminated clothing and rinse/shower with plenty of water.
- Use in a well ventilated place/Use protective clothing commensurate with exposure levels.

7.2. Conditions for safe storage, including any incompatibilities

- Store at ambient temperature in dry and ventilated place.
- Keep dry & protected from direct sunlight.
- Store away from incompatible materials like heat, sparks, flame etc.
- Keep securely closed when not in use.

7.3. Specific end use(s)



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- 3,5-Dimethylpiperidine is used as an intermediate in the manufacturing of active pharmaceutical ingredients

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parameters

8.1.1 Exposure Limits Values

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
3,5-Dimethylpiperidine	Not available	Not available	Not available

8.1.2 Exposure Limits (International):

- Not available.

8.1.3 Derived No-Effect-Levels (DNEL) / Predicted No-effect-concentration (PNEC)

- DNEL and PNEC data not available.

8.2. Exposure controls

8.2.1 Appropriate Engineering Controls:

- 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.

8.2.2. Personal Protection:

- Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.
- **Hands:** Wear appropriate protective gloves to prevent skin exposure.
- **Eyes:** Safety goggles/ Chemical Safety glasses and Face shield.
- **Clothing:** Boots and clothing to prevent contact.
- **Respirator:** Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary. For emergency situations, wear a positive pressure, pressure-demand, full face piece self-contained breathing apparatus (SCBA) or pressure-demand supplied air respirator with escape SCBA and a fully-encapsulating, chemical resistant suit. (EPA,1998).

General Industrial hygiene:

- Immediately change contaminated clothing.
- Apply skin protective barrier cream.
- Wash hands and face after working with the substance.
- Under no circumstances eat or drink at the workplace.
- Do not inhale substances, work underhood.

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties.

Sr.No.	Parameter	Typical value
1)	Appearance	Clear, colorless liquid.
2)	Odor	Like amine.
3)	Odor Threshold	Not available
4)	pH	Not Available
5)	Melting point/Freezing point	Not Available
6)	Boiling Point	144°C @760 mmHg
7)	Flash point	< 40 °C
8)	Evaporation rate (n-BuAc=1)	Not available
9)	Flammability	Flammable
10)	Upper/lower flammability or Explosive limits	Not available
11)	Vapor pressure	647 Pa at 25°C (by Modified Grain Method)
12)	Vapor density (air=1)	3.9
13)	Relative density	0.83 - 0.85 at 25°C
14)	Solubility	Slightly soluble in water (55808 mg/L at 25°C)



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15)	Partition coefficient : n-(Octonol / water)	2.02
16)	Auto-ignition temperature	Not available
17)	Decomposition temperature	Not available
18)	Viscosity	Not available
19)	Explosive property	Not available
20)	Oxidizing property	No

SECTION 10: STABILITY AND REACTIVITY

Reactivity

- Not available.

Chemical stability

- Stable under normal condition of temperature and pressures.

Possibility of hazardous reactions

- Hazardous Polymerization: Not reported.

Conditions to avoid

- Keep away from High temperature, mechanical shock, sparks, incompatible materials, ignition sources, excess heat, and moisture

Incompatible materials

- Acids, aldehydes, strong oxidizing agents.

Hazardous decomposition products

- Thermal decomposition may produce carbon monoxide, oxides of nitrogen, carbon dioxide and irritating & toxic fumes.

SECTION 11: TOXICOLOGICAL INFORMATION

a) Acute toxicity

- **Oral rat LD50-** 477.28 mg/kg (Predicted Oral rat LD50 from Consensus method)

RTECS # Unlisted

b) Skin corrosion/irritation

- Causes skin irritation.

c) Serious eye damage/irritation

- Causes eye irritation.

d) Respiratory or skin sensitization

- No information available.

e) Germ cell Mutagenicity

- No information available.

f) Carcinogenicity

- Not listed by NTP, IARC and OSHA.
- Not present on the EU CMR list.

g) Reproductive toxicity

- No data is available.

h) STOT-single exposure

- May cause respiratory irritation.

i) STOT- repeated exposure

- No data available.

j) Aspiration Hazards

- No data available.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity

Ecotoxicity:

Fathead minnow LC50 (96 hr): 178.25 mg/L (Predicted Fathead minnow LC50 (96 hr) from Consensus method)

Daphnia magna LC50 (48 hr): 15.53 mg/L (Predicted Daphnia magna LC50 (48 hr) from Consensus method)

Persistence and degradability:

- It is expected to be biodegradable in aerobic and anaerobic conditions.

Bioaccumulative potential:

- BCF = 7.2
- Log Kow = 2.02

Based on the Log Kow and Bioconcentration factor value it is expected to have negligible potential to concentrate in fatty tissue of fish and aquatic organisms relative to its surroundings.

Mobility in soil (Predicted):

- Log Koc= 2.389 (estimated). Low sorption.
- Henry's Law Constant: 1.23E-005 atm-m³/mole at 25 degrees. It is volatile from aqueous bodies.
- Log Kow= 2.02 (estimated). Low potential to bioaccumulate.



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Other adverse effects.

- Environment Fate:**

Based on the environmental modeling, this material has a low potential to get absorbed in the organic matter of soil and is volatile from water bodies. Since this is an estimated result it is recommended that the material should be disposed into the environment. The material should never be disposed into the sewage.


SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

- Burn in a chemical incinerator equipped with an afterburner and scrubber.
- Dispose of this material in accordance with standard practice for disposal of potentially hazardous materials as required by applicable federal, state or local laws. Note that disposal regulations may also apply to empty containers and equipment rinsates.

SECTION 14: TRANSPORT INFORMATION

- This substance is considered to be Hazardous for transport by Air/Rail/Road and Sea and thus regulated by IATA/ICAO/ARD/RID/IMO /IMDG.

S.No	Agency	UN Number	Proper Shipping name	Hazard Class	Packing Group
Land Transport	ADR/RIC	UN1993	Flammable liquid, N.O.S. (3,5-dimethylpiperidine)	3	III
Maritime Transport	IMDG	UN1993	Flammable liquid, N.O.S. (3,5-dimethylpiperidine)	3	III
Air Transport	IATA	UN1993	Flammable liquid, N.O.S. (3,5-dimethylpiperidine)	3	III
Hazard Label		Flammable			

Environmental hazards:

- Marine pollutant: No.

SECTION 15: REGULATORY INFORMATION

Classification as per CLP Regulation 1272/2008:

- Hazards Class and Category:** Flamm.Liq.Cat.3, Acute Toxicity-Oral cat.4, Skin Irrit.cat.2, Eye irrita.Cat.2, STOT-Single. Cat 3
- Hazard Statements:** H226;H302,H315;H319,H335

Chemical Inventory Lists:	Status
TSCA:	Listed (Active)
EINECS:	252-730-6
Canada(DSL/NDSL):	Listed/NDSL
Japan:	5-679



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Korea:	Not listed
Australia:	Not listed
China: IECSC	Not listed
Philippines	Not Listed
New Zealand	Not Listed

US information

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act): 3,5-Dimethylpiperidine is not listed

SARA 302/304 : 3,5-Dimethylpiperidine is not listed

SARA 311/312 : See section 2 for more information

California Prop. 65: 3,5-Dimethylpiperidine is not listed

CAA (Clean Air Act): 3,5-Dimethylpiperidine is not listed

CWA (Clean Water Act): 3,5-Dimethylpiperidine is not listed

EU Information

Water hazard class (WGK) WGK 3 (Severe hazards to water)

Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No. 1907/2006: 3,5-Dimethylpiperidine is not listed

SECTION 16: OTHER INFORMATION

Compilation information of safety data sheet

Chemical: 3,5-Dimethylpiperidine

CAS #: 35794-11-7

File Name: 0027Bh Ghs11 Div.3 sds 3,5-Dimethylpiperidine

Revision Number: 11

Date of Revision: February 26, 2024

Revision Due Date: January, 2027

(a) 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.
- IDLH= Immediately Dangerous to Life or Health.
- UEL= Upper Explosive Limit.
- LEL= Lower Explosive Limit.
- 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.
- CERCLA= Comprehensive Environmental Response, Compensation, and Liability Act.
- SARA= Superfund Amendments and Reauthorization Act.
- NFPA= National Fire Protection Association.
- WHIMS= Workplace Hazardous Materials Information System.
- DSL/NDSL= Domestic/Non-Domestic Substances List.
- CSR=Chemical Safety Report.
- BCF = Bio Concentration Factor.
- DNEL = Derived No Effect Level.
- PNEC = Predicted No Effect Concentration.
- TLV = Threshold Limit Value.
- ACGIH = American Conference of Governmental Industrial Hygienists.
- REACH = Registration, Evaluation .Authorisation and Restriction of Chemicals.
- CLP = Classification, Labelling and Packaging.
- LD / LC = Lethal Doses / Lethal Concentration.
- GHS = Globally Harmonised System.
- ADR = Accord europeen relative au transport international de marchandises.
- 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.

(b) Key Literature reference and sources for data



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Biographical reference and data sources

- CLP REG (regulation) (EC) no. 1272/2008, last modification by regulation (EC) no. 790/2009
- DIR 67/548/EWG, last modification by DIR 2009/2/EC
- REG (EC) no. 1907/2006, last modification by REG (EC) Nr. 453/2009

Internet

- RTECS

Company's Declaration:

Information contained in this SDS is believed to be correct but no representation, guarantee or warranties of any kind are made as to its accuracy, suitability for a particular application or results to be obtained from them. This SDS shall be used as a guide only. Jubilant Ingrevia Limited makes no warranties expressed or implied of the adequacy of this document for any particular purpose.

(End of Safety Data Sheet)
