



3- Aminopyridine

Safety Data Sheet

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

Date of compilation : October 19, 2012

File Name : 0151Gj Ghs10 Div.3 sds 3-Aminopyridine

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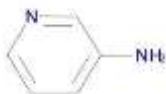
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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

PRODUCT NAME : 3-Aminopyridine
CAS RN : 462-08-8
EC# : 207-322-2
SYSTEMATIC NAME : 3-Aminopyridine; 3-Pyridinamine, Beta-Aminopyridine, 3-pyridylamine
MOLECULAR FORMULA : C₅H₆N₂
STRUCTURAL FORMULA



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

1.2.1. Relevant identified uses

3-Aminopyridine is used as an intermediate in the pharmaceutical industries.

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

Acute toxicity Oral: Category 3
Acute Toxicity Dermal: Category 3
Skin corrosion / irritant: Category 2
Serious eye damage/eye irritation: Category 2A
Hazardous to the Aquatic Environment: Category 1
(Acute)
Hazardous to the Aquatic Environment: Category 1
(Chronic)

2.2. Label Elements

Hazard Pictogram: GHS 06, GHS 09

Signal Word: Danger!



HAZARD AND PRECAUTIONARY STATEMENTS:

HAZARD STATEMENTS

- H301: Toxic if swallowed.
- H311: Toxic in contact with skin.
- H315: Causes skin irritation.
- H319: Causes serious eye irritation.
- H410: Very toxic to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

- P264: Wash clothes thoroughly after handling.
- P280: Wear protective gloves/protective clothing/eye protection/face protection.



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- P270: Do not eat, drink or smoke when using this product.
- P273: Avoid release to the environment.
- P305+351+338: IF IN EYES: Rinse continuously 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.
- P301+310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
- P330: Rinse mouth.
- P302+352: IF ON SKIN: Wash with plenty of soap and water.
- P312: Call a POISON CENTER or doctor/physician if you feel unwell.
- P332+P313: If skin irritation occurs: Get medical advice/attention.
- P362: Take off contaminated clothing and wash before reuse.
- P363: Wash contaminated clothing before reuse.
- P391: Collect spillage.
- P405: Store locked up.
- 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-Aminopyridine	462-08-8	207-322-2	≥ 98%	Acute toxicity Oral: Category 3 Acute Toxicity Dermal: Category 3 Skin corrosion / irritant: Category 2 Serious eye damage/eye irritation: Category 2A Hazardous to the Aquatic Environment: Category 1 (Acute) Hazardous to the Aquatic Environment: Category 1 (Chronic)

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.
- **Ingestion:** If swallowed call a poison center if you feel unwell. Rinse mouth. Make victim drink plenty of water and induce vomiting. Seek medical attention

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

Acute effects

- Toxic if swallowed and on contact with skin. Absorption may occur from gastrointestinal tract, the skin and the respiratory tract. Prolonged exposure may cause irritation, skin burns and/or systematic poisoning.

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.

- Note to the Physician: Treat symptomatically.

SECTION 5: FIRE-FIGHTING MEASURE

5.1. Extinguishing media

- *Appropriate extinguishing media:* Dry chemical powder, carbon dioxide, and alcohol resistant foam. Water may also be used. Water sprays 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.



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5.2. Special Protective Equipment and Precautions for Fire Fighter

- 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.

5.3. Unusual fire and explosion hazard

- 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.

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.
- Alert Emergency Responders and tell them location and nature of hazard.
- Clean up all spills immediately following relevant Standard Operating Procedures.

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. Storage

- Store at ambient temperature in a dry and well ventilated place.
- Store away from incompatible materials.
- Keep securely closed when not in use.

SECTION 8 : EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parameters



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Exposure Limits Values

Chemical name	WEL 8hr TWA (ppm)	STEL (ppm)	NIOSH	ACGIH	OSHA - Final PELs
3-Aminopyridine	Not available	Not available	Not available	Not available	Not available

Exposure Limits (International):

- Not available.

Exposure controls

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. 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 Hygiene and general comments:

- Immediately change contaminated clothing.
- Apply skin protective barrier cream.
- Wash hands and face after working with the substance.

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

- Information on basic physical and chemical properties.

Sr.No.	Parameter	Typical value
1.	Appearance	Yellow to brown solid
2.	Odor	Characteristic
3.	Odor Threshold	Not available
4.	pH	10 at 20°C (100g/L)
5.	Melting point/Freezing point	64-65°C (Melting point)
6.	Boiling Point	252 °C
7.	Flash point	88-92°C-Closed Cup
8.	Evaporation rate (n-BuAc=1)	Not available
9.	Flammability	Non Flammable
10.	Upper/lower flammability or Explosive limits	Not available
11.	Vapor pressure	Not available
12.	Vapor density (air=1)	Not available
13.	Relative density/Bulk density	1.107g/cm ³
14.	Solubility	Soluble in water.
15.	Partition coefficient : n-(Octonol / water)	0.11
16.	Auto-ignition temperature	Minimum ignition temperature of a dust layer with a thickness of 5 mm: > 415°C



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		Dust cloud ignition temperature: > 540°C
17.	Decomposition temperature	Not available
18.	Viscosity	Not applicable
19.	Explosive property	No
20.	Oxidizing property	No

SECTION 10: STABILITY AND REACTIVITY

- **Stability:** Stable under normal temperature and pressure.
- **Conditions to avoid:** Keep away from High temperature, sparks, moist condition, mechanical shock, incompatible materials, ignition sources, excess heat. Strong Heating,
- **Incompatible chemicals:** Strong oxidizing agents, strong acid, acid chlorides and acid anhydrides.
- **Hazardous decomposition products:** Thermal decomposition may produce carbon monoxide and oxides of nitrogen, carbon dioxide and irritating and toxic fumes.
- **Hazardous Polymerization:** Has not been reported.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects

- **Acute toxicity**
- 3-Aminopyridine causes skin, and serious eye irritation. It may cause respiratory tract irritation. It is toxic if swallowed, and toxic in contact with skin. The detailed of toxic effects are mentioned in section 4 of MSDS.
Target organ: Damage to the nervous system.

RTECS#: US1650000

ACUTE ORAL LD₅₀= 50-100 mg/kg
ACUTE DERMAL LD₅₀ = 500-1000 mg/kg

- a) **Skin corrosion/irritation**
 - Causes skin irritation.
- b) **Serious eye damage/irritation**
 - Causes serious eye irritation.
- c) **Respiratory or skin sensitization**
 - No data is available
- d) **Germ cell Mutagenicity**
 - No data is available.
- e) **Carcinogenicity**
 - No data is available.
- f) **Reproductive toxicity**
 - No data is available.
- g) **STOT-single exposure**
 - No data is available.
- h) **STOT- repeated exposure**
 - No data available.
- i) **Aspiration Hazards**
 - No data available.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Ecotoxicity:

- Toxicity Lethal concentration 50% in water (96 hours) Fish = 8.6 mg / L
- Aquatic EC50 (48h) Daphnia magna = 7.1 mg / L
- Aquatic EC50 (72h) Selenastrum capricornutum (algae) = 0.25 mg / L
- NOEC (72-hr) Selenastrum capricornutum (algae) = 0.051 mg / L

12.2 Persistence and degradability

- Material is not readily biodegradable, completely degraded under aerobic conditions and anaerobic (> 96 days)

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12.3 Bio accumulative potential

- BCF = 3.2
- Log Kow = 0.11 at 25 °C

3-Aminopyridine is not expected to bioaccumulate in the food chain because it does not exceed the BCF criteria. It is unlikely that it will concentrate biologically in aquatic species.

12.4 Mobility in soil

- Koc= 34.55 (Estimated).
- Henry's Law Constant = 2.49E-009 atm/m³ mole at 25 degrees. It is non-volatile from aqueous bodies.
- Log Kow = 0.11 (Estimated)

12.5 Other adverse effects.

- Environment Fate:
- Based on the environmental modeling, 3-Aminopyridine is not expected to bioaccumulate in the food chain and is estimated to be persistent in the environment. It is chronically toxic to fish. 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.
- 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 reinstates.

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.

Mode of Transport	Agency
Land transport	ADR/RID
Maritime Transport	IMDG
Air Transport	IATA

14.1. UN number

- UN 2671

14.2. UN proper shipping name

- meta-Aminopyridines

14.3. Transport hazard class(es)

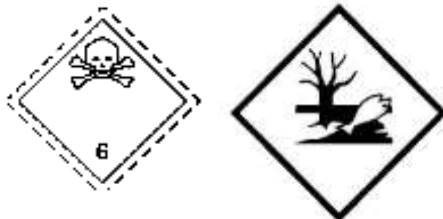
- Toxic, Class 6.1
- Hazard Label.

14.4. Packing group

- II

14.5. Environmental hazards

- It is expected that this chemical is a marine pollutant and is harmful to the Aquatic environment.



SECTION 15: REGULATORY INFORMATION

- European Union Information

Classification as per CLP Regulation 1272/2008:

- **Hazards Class and Category:** Acute Tox Oral Cat 3; : Acute Tox Dermal Cat.3; Eye irrit Cat 2, Skin Irrit Cat 2, Aquatic acute Cat.1, Aquatic chronic Cat 1
- **Hazard Statements:** H301; H311; H315, H319,410

Chemical Inventory Lists:	Status
TSCA:	Listed
EINECS:	207-322-2
Canada(DSL/NDSL):	Listed (DSL)
Japan:	5-725
Korea:	KE-29926
Australia:	Listed
China: IECSC	Listed



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US information

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

SARA 302/304 : 3-Aminopyridine is not listed

SARA 311/312 : See section 2 for more information

California Prop. 65: 3-Aminopyridine is not listed

CAA (Clean Air Act): 3-Aminopyridine is not listed

CWA (Clean Water Act): 3-Aminopyridine is not listed

EU Information

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

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

SECTION 16: OTHER INFORMATION

a) Compilation information of safety data sheet

Date of compilation : October 19, 2012
Chemical : 3-Aminopyridine
CAS # :462-08-8
File Name : 0151Gj Ghs10 Div.3 sds 3-Aminopyridine
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Supersedes date : January 02, 2024

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

- PBT =Persistent Bioaccumulative and Toxic.
- vPvB= Very Persistent and Very Bioaccumulative.
- 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.
- WHIMS= Workplace Hazardous Materials Information System.
- DSL/NDL= 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 .Authorization and Restriction of Chemicals.
- CLP = Classification, Labeling and Packaging.
- LD / LC = Lethal Doses / Lethal Concentration.
- GHS = Globally Harmonized 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.

c) Key Literature reference and sources for data

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

d) List of hazard statements

Hazards Statements	
	<ul style="list-style-type: none">• H301: Toxic if swallowed.• H311: Toxic in contact with skin.• H315: Causes skin irritation.



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- | | |
|--|--|
| | <ul style="list-style-type: none">• H319: Causes serious eye irritation.• H410: Very toxic to aquatic life with long lasting effects. |
|--|--|

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)
