

As per Globally Harmonized System (GHS)

Product Identification: 2-Amino-4-methylpyridine

0017Gj Ghs14 Div.3 sds 2-Amino-4-

methylpyridine

Date of issue: February 02, 2024

SDS Code : 0017Gj Ghs14 Div.3 sds 2-Amino-4-methylpyridine

Date of Compilation: April 17, 2012

Date of Revision : February 02, 2024

Due Date of Revision: January, 2027

Revision Number : 14

Version Number : 0017Gj Ghs14 Div.3 sds 2-Amino-4-methylpyridine

Supersedes date : February 03, 2022

Supersedes version : 0017Gj Ghs13 Div.3 sds 2-Amino-4-methylpyridine



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SECTION 1.: IDENTIFICATION

PRODUCT NAME: 2-Amino-4-Methylpyridine

CAS RN : 695-34-1

EC# : 211-780-9

SYNONYMS: 4-methyl-2-pyridylamine;2-Amino-4-methylpyridine2-Amino-4-picoline;

4-Methyl-2-aminopyridine;4-Methyl-2-pyridinamine;4-Picolylamine.

SYSTEMATIC NAME: 2-Amino-4-Methylpyridine

MOLECULAR FORMULA: C₆H₈N₂

STRUCTURAL FORMULA:

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. PHONE NO: +91-120-4361000

FAX NO : +91-120-4234881 / 84 / 85 / 87 / 95 / 96

Email: support@jubl.com

Website: www.jubilantingrevia.com

Emergency telephone

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



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

Product Uses:

• It is used as an intermediate in the pharmaceutical industry. It is also used for commercial purposes.

SECTION 2: HAZARDS IDENTIFICATION

GHS CLASSIFICATION

Skin corrosion / irritant: Category 2 Acute toxicity Oral: Category 3 Acute Toxicity Dermal: Category 3

Serious eye Damage/eye irritation: Category 2 H319 Specific Target organ Toxicity: Category 3 H335

(After single exposure)

Hazard Pictogram: GHS 06

Signal Word: Danger!



HAZARD STATEMENTS

- H301: Toxic if swallowed.
- H311: Toxic in contact with skin.
- H315: Causes skin irritation.
- H319: Causes serious eve irritation.
- H335: May causes respiratory irritation.

PRECAUTIONARY STATEMENTS

Prevention

- P264: Wash hands thoroughly after handling.
- P280: Wear protective gloves/protective clothing/eye protection/face protection.
- P270: Do not eat, drink or smoke when using this product.

Response

- P301+P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
- P330: Rinse mouth.
- P302+P352: IF ON SKIN: Wash with plenty of soap and water.
- P312: Call a POISON CENTER or doctor/physician if you feel unwell.
- P361: Remove/Take off immediately all contaminated clothing.
- P332+P313: If skin irritation occurs: Get medical advice/attention.
- P362: Take off contaminated clothing and wash before reuse.





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• 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.

Storage

• P405: Store locked up.

• P403+P233: Store in a well ventilated place. Keep container tightly closed.

Disposal

• P501: Dispose of contents/container to local/regional/national/international regulations.

SECTION 3: COMPOSITION / INFORMATION ON INGERDIENTS

Sr.No.	Chemical	CAS#	EC#	Purity
1.	2-Amino-4-Methylpyridine	695-34-1	211-780-9	100%

SECTION 4: FIRST AID MEASURES

4.1.1 Route of exposure: Skin, eyes, inhalation and ingestion.

4.1.2 Advice

- Rinse eyes cautiously with water for at least 15 minutes. Remove contact lenses if easy to do so. Continue rinsing. Seek medical attention.
- Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
- Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- Call a POISON CENTER or doctor/physician if you feel unwell.

Key symptoms

Acute effects:

- Toxic if swallowed and in contact with skin. Irritating to tissues of the mucous membranes and upper respiratory tract, eyes and skin. May cause convulsions.
- *Target organs:* Damage to the Heart and may effect Nervous System.

Chronic effects:

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

FIRST AID:

• **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.



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• **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.
- **Ingestion**: If swallowed call a poison center if you feel unwell. Rinse mouth. Do NOT induce vomiting by use of emetics. Seek medical attention.

SECTION 5: FIRE-FIGHTING MEASURES

Flash Point: 118 ^oC Flammability: Non Flammable material

Extinguishing media:

• Appropriate extinguishing media: Dry chemical powder, chemical foam, and alcohol resistant foam. Do not use water jet or fog (spray) to extinguish. Water sprays can be effective in cooling down the fire-exposed containers and knocking down the vapors. Water can be effective in cooling down the fire-exposed containers. Do not get water inside the containers

Special Protective Equipment and Precautions for Fire Fighter:

- 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) and full protective clothing. The chemical is harmful in contact with skin.
- Chemical is water-soluble. Report any run-off of fire waters contaminated with this chemical as per local and federal procedures applicable.

Unusual fire and explosion hazard:

- Toxic vapors may be released on thermal decomposition including nitrogen oxides, carbon monoxide carbon di-oxide and cyanide.
- High vapor concentration may result in an explosion hazard.
- When heated to decomposition, it emits highly toxic fumes of phosgene and chlorides.
- Vapors are heavier than air. May travel considerable distance from source and flashback.
- Water may cause frothing if it gets below surface of the liquid and turns to steam. Contact with metals may evolve flammable hydrogen gas.

SECTION 6: ACCIDENTAL RELEASE MEASURES



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Minor Spills

• Clean up all spills immediately following relevant Standard Operating Procedures.

- Avoid breathing vapors and contact with skin and eyes.
- Shut off leak source if possible.
- Shut off all possible sources of ignition.
- Wear protective clothing, boots, impervious gloves and safety glasses.
- Wipe up.
- Decontaminate all equipment.

Major Spill

- Alert Emergency Responders and tell them location and nature of hazard.
- Shut off all possible sources of ignition and increase ventilation.
- Wear protective clothing, full boots, impervious gloves, safety glasses and Self Contained Breathing Apparatus (SCBA), as may be deemed appropriate.
- Clear area of personnel and move upwind.
- Stop leaks if possible.
- 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.
- 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

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.

Storage

- Store in a well closed container in a dry place under ambient conditions.
- Store away from incompatible materials.
- Keep only in original container.



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• Keep securely closed when not in use.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

Exposure Limits Values

Chemical name	ACGIH TLV	OSHA PEL	NIOSH	
2-Amino-4-Methylpyridine	Not established	Not established	Not established	

Exposure Limits (International):

• Not available.

OSHA Vacated PELs:

• No OSHA Vacated PELs are listed for this chemical.

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

• DNEL and PNEC data 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.

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).



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General Hygiene and general comments:

• Wash hands and face after working with substance.

• Immediately change contaminated clothing.

• Apply skin protective barrier cream.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties.

Sr.No.	Parameter	Typical value
1.	Appearance	Off-white solid flakes
2.	Odor	Similar to pyridine
3.	Odor Threshold	Not available
4.	Melting point	98-100°C
5.	Boiling point	230 °C @ 760.00 mm Hg
6.	Flash point	118°C
7.	Evaporation rate (n-BuAc=1)	Not available
8.	Explosive limits	Not available
9.	Vapor pressure	3.71 Pa at 25°C
10.	Vapor density (air=1)	3.2
11.	Specific gravity (water=1)	Not available
12.	Solubility	Slightly soluble
13.	pН	Not available
14.	Log Kow (octonol/water)	1.08
15.	Auto-ignition temperature	Not available
16.	Decomposition temperature	Not available
17.	Viscosity	Not available
18.	Molecular Weight	108.14
19.	pKa (@25 ⁰ C)	Not available
20.	Log Koc	1.86
21.	Flammable	No
22.	Oxidizer	No
23.	Corrosive material	No



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24. Explosive material No

SECTION 10: STABILITY AND REACTIVITY

- Stability: Stable under normal condition of temperature and pressure.
- Conditions to avoid: Keep away from moisture and incompatible chemicals.
- Incompatible chemicals: Acids and acid chlorides, and mineral acids like sulphuric acid
- **Hazardous decomposition:** Thermal decomposition may produce nitrogen oxides and carbon oxides.
- Hazardous Polymerization: Not reported.

SECTION 11: TOXICOLOGICAL INFORMATION

- a) Acute toxicity
- Toxic if swallowed and in contact with skin. Irritating to tissues of the mucous membranes and upper respiratory tract, eyes and skin. May cause convulsions.
- Target organs: Damage to the Heart and may effect Nervous System.

RTECS # TJ5150000

LD50/LC50:

- ACUTE ORAL LD50 (RAT) = 200 mg/kg
- ACUTE DERMAL LD50:(Guinea Pig) = 500mg/kg
- 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.
- According to information presently available 2-Amino-4-methylpyridine is not found to be carcinogenic.

g) Reproductive toxicity



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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:

- The Ecotoxicity data is not available.
- Fish ChV (estimated) = 0.7 (mg/l). Toxic effects are expected on saturation.

Persistence and degradability:

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

Bioaccumulative potential:

- BCF = 3.2
- Log Kow= 1.08

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

Mobility in soil (Predicted):

- Log Koc= 1.86 (estimated). Low sorption.
- Henry's Law Constant 6.14E-007 atm-m3/mole at 25 degrees. Slightly volatile from aqueous bodies.
- Log Kow=1.08 (estimated). Low potential to bioaccumulate.

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 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

Waste treatment methods



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• 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/ TDG/ US DOT /IMO/IMDG.

S.No	Agency	UN Number	Proper Shipping name	Hazard Class	Packing Group
Land Transport	TDG/US DOT	UN 2811	Toxic solid, organic, n.o.s. (2-Amino-4-methyl pyridine)	6, (6.1)	III
Maritime Transport	IMDG	UN 2811	TOXIC SOLID, ORGANIC, N.O.S.(2- Amino-4-methylpyridine)	6, (6.1)	III
Air Transport	IATA	UN 2811	TOXIC SOLID, ORGANIC, N.O.S.(2- Amino-4-methylpyridine)	6, (6.1)	III
Hazard Label		Toxic, 6, (6.1)	:{	6	

Environmental hazards:

• Marine pollutant: No.

SECTION 15:

REGULATORY INFORMATION

Classification as per CLP Regulation 1272/2008:

• Hazards Class and Category: Acute tox oral cat.3; Acute tox dermal Cat.3, skin iriitation Cat.2

• **Hazard Statements:** *H301*; *H311*; *H315*,*H319*,*H335*

US information

TSCA

CAS# 695-34-1 is listed on the TSCA inventory.

Health & Safety Reporting List



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None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

SARA

Section 302 (RQ)

None of the chemicals in this material have an RQ.

Section 302 (TPQ)

None of the chemicals in this product have a TPQ.

Section 313

No chemicals are reportable under Section 313.

Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

State Regulations:

2-Amino-4-picoline is not present on state lists from CA, PA,MN, MA, FL, or NJ.

Canada - DSL/NDSL

CAS# 695-34-1 is listed on Canada's NDSL List.

SECTION 16:

OTHER INFORMATION

Compilation information of safety data sheet

Chemical: 2-Amino-4-Methylpyridine

CAS #: 695-34-1

File Name: 0017Gj Ghs14 Div.3 sds 2-Amino-4-methylpyridine

Revision Number: 14

Date of Revision: February 02, 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.



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• 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 .Authorization and Restriction of Chemicals.
- CLP = Classification, Labeling and Packaging.
- LD / LC = Lethal Doses / Lethal Concentration.
- GHS = Globally Harmonized System.
- 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

Biographical reference and data sources

- Globally Harmonized System of Classification and Labelling of Chemicals (GHS)
- CLP REG (regulation) (EC) no. 1272/2008, last modification by regulation (EC) no. 790/2009
- REG (EC) no. 1907/2006, last modification by REG (EC) No. 830/2015.

Internet

RTECS



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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)