

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

Date of Compilation: May 25, 2012Date of Revision: February 14, 2024Due Date of Revision: January, 2027Revision Number: 11Version Number: 0577Gj Ghs11 Div03 sds 2-(Aminomethyl)pyridineSupersedes date: January 02, 2024Supersedes version: 0577Gj Ghs10 Div03 sds 2-(Aminomethyl)pyridine

Jubilant Ingrevia Limited

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2-(Aminomethyl)pyridine Safety Data Sheet According to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

| INGREVIA | | | | |
|---|---|-------------------|---|---------------------------|
| SECTION 1: IDENTIFICAT | ION OF THE SUBSTANCE/ MIXT | TURE AND OF T | HE COMPANY/ UNDERTAKING | |
| Product identifier | | | | |
| PRODUCT NAME CAS RN | : 2-(Aminomethyl) pyridine : 3731-51-9 | | | |
| EC# | : 223-090-5 | | | |
| SYNONYMS | : 2-Picolylamine, 2-Pyridinemethylamine, 2-Pyridylmethylamine, Picolamine | | | |
| SYSTEMATIC NAME | : 2-(Aminomethyl) pyridine, 2-Pyr : C ₆ H ₈ N ₂ | ridinemethanami | ne | |
| STRUCTURAL FORMULA: | . C61 18102 | | | |
| | NH ₂ | | | |
| Relevant identified uses | the substance or mixture and us | | iinst utical industry. <u>Uses advised against</u> : N | lone |
| Details of the supplier of the | | | | |
| Jubilant Ingrevia Limited | - caroly and onool | | | |
| | | d Bhartiagram, Ga | ajraula, District: Amroha, Uttar Pradesh | 244223, India. |
| | evia Limited., Plot 1-A, Sector 16-/ 120-4234881 / 84 / 85 / 87 / 95 / 96 | | rea, Noida, Uttar Pradesh, 201301 - Ind <u>com</u> - <u>www.jubilantingrevia.com</u> | a |
| mergency telephone numb | ber | | | |
| or Chemical Emergency ON | ILY (in the case of fire, leak, spill, e | exposure or accid | dent) Call | |
| Chemtrec: 1-800-424-9300 (L | JS), 1-703-527-3887 (Outside U.S | 5.) | | |
| Chemtrec (India) : 000-800-10 | 00-7141 | | | |
| | all Emergency Control Room Gajra | raula at 99970 22 | 412 | |
| SECTION 2: HAZARD(S) I | | | | |
| Classification of the substa | | | | |
| GHS-US classification | | | | |
| Skin corrosion / irritant: Categ Specific Target Organ Toxicity | | H314 H335 | Causes severe skin burns and eye day May cause respiratory irritation. | amage |
| abel Elements | | | | |
| Hazard Pictogram: GHS 05 | ,GHS07 | | | |
| Signal Word: Danger! | | | | |
| HAZARD AND PRECAUTION HAZARD STATEMENTS H314: Causes seve H335: May cause re | ere skin burns and eye damage. | | | |
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PRECAUTIONARY STATEMENTS Prevention

- P260: Do not breathe dust/fume/gas/mist/vapours/spray.
- P264: Wash hand thoroughly after handling.
- P280: Wear protective gloves/protective clothing/eye protection/face protection.
- P261: Avoid breathing dust/fume/gas/mist/vapours/spray
- P271: Use only outdoors or in a well-ventilated area
- P304+340: 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.
- P301+330+331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
- P303+361+353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P310: Immediately call a POISON CENTER or doctor/physician.
- P305+351+338: IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do continue rinsing.
- P363: Wash contaminated clothing before reuse.
- P337+313: Get medical advice/attention.
- 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

| Chemical | CAS # | EC# | Purity | GHS Classification |
|-------------------------|-----------|-----------|---------|---|
| 2-(Aminomethyl)pyridine | 3731-51-9 | 223-090-5 | >98.00% | Skin corrosion / irritant: Category 1B Serious eye damage/eye irritant: Category 2A Specific Target Organ Toxicity SE: Category 3 |

SECTION 4: FIRST AID MEASURES

Key symptoms Acute effects

• It causes severe skin burns and eye damage. It causes digestive and respiratory tract burns.

Chronic effects

To the best of our knowledge, the chronic health effects of this product 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.
- 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

Indication of any immediate medical attention and special treatment needed

Note to physicians: Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure. Treat symptomatically. SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing media

• Appropriate extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

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).
- Chemical is water-soluble. Report any run-off of firewater's contaminated with this chemical as per local and federal procedures applicable.
- Report any run-off of fire waters contaminated with this chemical as per local and federal procedures applicable.



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Unusual fire and explosion hazard:

- Toxic vapors may be released on thermal decomposition including nitrogen oxides, carbon monoxide and cyanide.
- 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 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

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.

Storage

- Store at ambient temperature, in a well-ventilated place.
- Keep securely closed when not in use.
- Keep in original containers.

SECTION 8 : EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

Exposure Limits Values

| Chemical name | STEL (ppm) | NIOSH | ACGIH | OSHA |
|-------------------------|----------------|----------------|----------------|----------------|
| 2-(Aminomethyl)pyridine | None Available | None Available | None Available | None Available |
| | | | | |

Exposure Limits (International):

Not available.

Exposure controls

Appropriate Engineering Controls:



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• 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: Dust production: dust mask with filter
- For emergency situations, wear a positive pressure, pressure-demand, full face piece self- contained breathing apparatus (SCBA) or pressuredemand supplied air respirator with escape SCBA and a fully-encapsulating, chemical resistant suit. (EPA, 1998).

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 | Colorless to yellowish oily liquid | | |
| 2 | Odor | Amine like | | |
| 3 | Odor Threshold | Not available | | |
| 4 | Melting point | -21°C | | |
| 5 | Boiling point | 82 - 85 deg C @ 12.00mm Hg | | |
| 6 | Flash point | 95°C (203°F) | | |
| 7 | Evaporation rate (n-BuAc=1) | Not available | | |
| 8 | Explosive limits | Not available | | |
| 9 | Vapor pressure | 0.01 mbar @ 20 C | | |
| 10 | Vapor density (air=1) | Not available | | |
| 11 | Specific gravity (water=1) | 1.058 | | |
| 12 | Solubility | Soluble in water | | |
| 13 | PH | 11-12 | | |
| 14 | Log Kow (octonol/water) | -0.47 | | |
| 15 | Auto-ignition temperature | Not available | | |
| 16 | Decomposition temperature | Not available | | |
| 17 | Viscosity | Not available | | |
| 18 | Molecular Weight | 108.14 | | |



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| 19 | PKa (@25ºC) | Not available |
|----|--------------------|---------------|
| 20 | Log Koc | 2.59 |
| 21 | Oxidizer | No |
| 22 | Corrosive material | Yes |
| 23 | Explosive material | No |

SECTION 10: STABILITY AND REACTIVITY

- Reactivity: No data available.
- Stability: Stable at normal conditions of temperature and pressure.
- **Conditions to avoid:** Keep away from High temperature, mechanical shock, incompatible materials, ignition sources, excess heat, and moisture. Avoid hygroscopic conditions, static discharge and uncontrolled exposure to high temperatures.
- Incompatible chemicals: Strong oxidizing agents, strong acids
- Hazardous decomposition: Thermal decomposition may produce carbon monoxide and oxides of nitrogen, carbon dioxide & nitrogen, Hydrogen chloride, hydrogen cyanide and irritating and toxic fumes.

Hazardous Polymerization: Not reported.

SECTION 11: TOXICOLOGICAL INFORMATION Information on toxicological effects

Acute toxicity

• 2-(Aminomethyl)pyridine causes severe skin burns and eye damage. It causes digestive and respiratory tract burns.

| | ACUTE TOXICITY DATA | | | | |
|---|----------------------|---------------------------|-----------|---|---|
| Type of Test | Route of Exposure | Species Observed | Dose Data | Toxic Effects | References |
| LD50 - Lethal dose, 50 percent kill | Intravenous | Rodent-mouse | 340 mg/kg | Behavioral - convulsions or effect on seizure threshold Behavioral - excitement | APFRAD Annales Pharmaceutiques Francaises. (SPPIF, B.P.22, F-41353 Vineuil, France) V.1- 1943- Volume(issue)/page/year: 26,345,1968 |
| LD50 - Lethal dose, 50 percent kill | Oral | Bird-quil | 750 mg/kg | Details of toxic effects not reported other than lethal dose value | AECTCV Archives of Environmental Contamination and Toxicology. (Springer- Verlag New York, Inc., Service Center, 44 Hartz Way, Secaucus, NJ 070944) V.1- 1973- Volume(issue)/page/year: 12,355,1983 |
| LD50 - Lethal dose, 50 percent kill | Oral | Bird-wild bird species | 562 mg/kg | Details of toxic effects not reported other than lethal dose value | AECTCV Archives of Environmental Contamination and Toxicology. (Springer- Verlag New York, Inc., Service Center, 44 Hartz Way, Secaucus, NJ 070944) V.1- 1973- Volume(issue)/page/year: 12,355,1983 |

| Skin corrosion/irritation | : Causes severe skin burns. |
|-----------------------------------|--|
| Serious eye damage/irritation | : Causes eye damage. |
| Respiratory or skin sensitization | : No data available |
| Germ cell Mutagenicity | : No data available |
| Carcinogenicity | 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. Not present on the EU CMR list. According to information presently available 2,3-Pyridine dicarboxylic acid is not found to be carcinogenic. |
| Reproductive toxicity | : No data available. |
| STOT-single exposure | : May cause irritation to respiratory system |
| STOT- repeated exposure | : No data available. |
| | |



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: No data available.

Additional Information

RTECS: US1840000 SECTION 12: ECOL

ECOLOGICAL INFORMATION

12.1 Toxicity :

Ecotoxicity:

2-(Aminomethyl) pyridine (3731-51-9)

 May cause long lasting harmful effects to aquatic life 100% of the mixture consists of components(s) of unknown hazards to the aquatic environment

12.2 Persistence and degradability

No data available

12.3 Bio accumulative potential

2-(Aminomethyl) pyridine (3731-51-9)

No data available

12.4 Mobility in soil

2-(Aminomethyl) pyridine (3731-51-9)

No data available

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 transportation by Air/ Rail/ Road and Sea and thus regulated by IATA/ ICAO/ ARD/ RID/ IMO/ IMDG/ US DOT.

| S.No | Agency | UN Number | Proper Shipping name | Hazard Class | Packing Group |
|-----------------------|----------|-----------|--|--------------|------------------|
| Land Transport | ADR/ RID | 2735 | Amines, liquid, corrosive, n.o.s. (2- (Aminomethyl)pyridine | 8 | Ш |
| Maritime Transport | IMDG | 2735 | Amines, liquid, corrosive, n.o.s. (2- (Aminomethyl)pyridine | 8 | II |
| Air Transport | ΙΑΤΑ | 2735 | Amines, liquid, corrosive, n.o.s. (2- (Aminomethyl)pyridine | 8 | II |



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Hazard Label Corrosive

Environmental hazards:

• Marine pollutant: No.

SECTION 15: REGULATORY INFORMATION

European Union Information

- Classification as per CLP Regulation 1272/2008:
- Hazards Class and Category: Skin dam Cat. 1B; STOT SE Cat. 3.
- Hazard Statements: H314; H335.

| Chemical Inventory Lists: | Status | |
|---------------------------|-----------------|--|
| TSCA: | Listed (Active) | |
| EINECS: | 223-090-5 | |
| Canada(DSL/NDSL): | Listed (NDSL) | |
| Japan: | Listed (ENCS) | |
| Korea: | Listed(KECI) | |
| Australia: | Not listed | |
| Taiwan | Listed (TSCI) | |
| The Philippines | Listed (PICCS) | |
| China: IECSC | Not listed | |
| New Zealand | Listed | |

US information

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

2-(Aminomethyl)pyridine is not listed

SARA 302/304 : 2-(Aminomethyl)pyridine is not listed

SARA 311/312 : See section 2 for more information

California Prop. 65: 2-(Aminomethyl)pyridine is not listed

CAA (Clean Air Act): 2-(Aminomethyl)pyridine is not listed

CWA (Clean Water Act): 2-(Aminomethyl)pyridine 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: 2-(Aminomethyl)pyridine is not listed

SECTION 16: OTHER INFORMATION

| a) | Compilation information of safety data sheet | | |
|----|--|---|--|
| | Date of compilation | : May 25, 2012 | |
| | Chemical | : 2-(Aminomethyl) pyridine | |
| | CAS # | : 3731-51-9 | |
| | File Name | : 0577Gj Ghs11 Div.03 sds2-(Aminomethyl) pyridine | |
| | Revision Number | : 11 | |
| | Date of revision of SDS | : February 14, 2024 | |
| | Revision Due Date | : January, 2027 | |
| | Supersedes date | : January 02, 2024 | |

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.



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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.
- 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

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)