

Safety Data Sheet

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

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Version Number: 0206Gj Ghs04 Div.3 sds 2,6-Dibromopyridine

Supersedes date: January 02, 2024

Supersedes version: 0206Gj Ghs03 Div.3 sds 2,6-Dibromopyridine



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

1.1. Product identifier

Product identification : 2,6-Dibromopyridine

CAS RN : 626-05-1 EC# : 210-926-9

Trade name : 2,6-Dibromopyridine

Systematic Name : 2,6-Dibromopyridine; Pyridine, 2,6-dibromo-Synonyms : 2,6-dibromo-pyridin; Pyridine, 2,6-dibromo-

 $\begin{tabular}{ll} Molecular Formula & : $C_5H_3NBr_2$ \\ \end{tabular}$

Structural Formula



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

1.2.1. Relevant identified uses

2,6-Dibromopyridine is probably used as an intermediate synthesis of active pharmaceutical ingredients like Acrivastitin and Flupirtine in the 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

Acute toxicity, Oral (Category 2), H300 Skin irritation (Category 2), H315 Eye irritation (Category 2), H319

Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

2.2. Label Elements

GHS US Classification

Pictograms: GHS06





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Signal word: Danger!

Hazard and precautionary statements:

Hazard Statements

- H300: Fatal if swallowed.
- H315: Causes skin irritation.
- H319 Causes serious eye irritation.
- H335 May cause respiratory irritation.

PRECAUTIONARY STATEMENTS

- P264: Wash hands thoroughly after handling.
- P270: Do not eat, drink or smoke when using this product.
- P261: Avoid breathing dust/fume/gas/mist/vapors/spray.
- P271: Use only outdoors or in a well-ventilated area.
- P280: Wear protective gloves/protective clothing/eye protection/face protection.
- P301+P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
- P330: Rinse mouth.
- P312: Call a POISON CENTER or doctor/physician if you feel unwell.
- P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P302+P352: IF ON SKIN: Wash with plenty of soap and water.
- P332+P313: If skin irritation occurs: Get medical advice/attention.
- 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.
- P362: Take off contaminated clothing and wash before reuse.
- P405: Store locked up.
- P501: Dispose of contents/container to local/regional/national/international regulations.

2.3 Other Hazards

Substance is not classified as PBT nor as vPvB. For further details see section 12.

SECTION 3: Composition/information on ingredients

Substance	CAS No.	EINECS No.	Purity	GHS US Classification
2,6-Dibromopyridine	626-05-1	210-926-9	98 %	Acute toxicity, Oral (Category 2), H300 Skin irritation (Category 2), H315 Eye irritation (Category 2), H319 Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

SECTION 4: First aid measures

4.1. Description of first aid measures

Key symptoms

Acute effects

4.1. Description of first aid measures.

4.1.1 Route of exposure: inhalation, skin, eye 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.

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

Acute effects:

2,6-Dibromopyridine is fatal if swallowed and if inhaled. It is irritating to skin, eyes and respiratory system. Material is irritating to mucous membranes and upper respiratory tract.

Chronic effects:

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

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



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- 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.

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 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 cyanide.
- High vapor concentration may result in an explosion hazard.
- Vapors are heavier than air. May travel considerable distance from source and flashback.

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).
- Chemical is water-soluble. 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

6.1.1 For non-emergency personnel

- 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.

6.1.2 For emergency personnel

- 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.
- Wine 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



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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 in a ambient temperature in dry and ventilated place.
- Store away from incompatible materials.
- · Keep only in original container.
- · Keep securely closed when not in use.

7.3. Specific end use(s)

 2,6-Dibromopyridine is probably used as an intermediate synthesis of active pharmaceutical ingredients like Acrivastitin and Flupirtine in the pharmaceutical industry.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parameters

Exposure Limits Values

_	Chemical name	STEL (ppm)	NIOSH	ACGIH	OSHA
	2,6-Dibromopyridine	None available	None available	None available	None available

8.1.2Exposure 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 concentrationsbelow 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.

8.3. General Hygiene and general comments

- Wash hands and face after working with substance.
- · Immediately change contaminated clothing.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

. Information on basic physical and chemical properties

Sr.No.	Parameter	Typical value
1)	Appearance	White to grey crystalline powder
2)	Odor	Characteristic



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3)	Odor Threshold	Not available
4)	рН	6-7 (5% Soln in 80% w/w Aq.Methanol)
5)	Melting point/Freezing point	117 – 121 °C
6)	Boiling Point	255 °C @ 760.00mm Hg
7)	Flash point	213 °C (415.40 °F)
8)	Evaporation rate (n-BuAc=1)	Not available
9)	Flammability	Non Flammable
10)	Upper/lower flammability or Explosive limits	Not available
11)	Vapor pressure	0.07 mm Hg at 25° C
12)	Vapor density (air=1)	Not available
13)	Relative density	Not available
14)	Solubility	Insoluble in water
15)	Partition coefficient : n-(Octonol / water)	2.6
16)	Auto-ignition temperature	435 °C (815.00 °F)
17)	Decomposition temperature	Not available
18)	Viscosity	Not available
19)	Explosive property	No
20)	Oxidizing property	No

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

• 2,6-Dibromopyridine is white to grey crystalline powder like characteristic odour. It is insoluble in water.

10.2. Chemical stability

Stable at normal conditions of temperature and pressure.

10.3. Possibility of hazardous reactions

Hazardous Polymerization: Will not occur.

10.4. Conditions to avoid

• Keep away from humid conditions, heat, sparks, flame, high temperature and incompatible chemicals, dust generation, u.v. light, strong oxidants and strong reducing agents. Avoid loosely closed container and fluctuating temperature.

10.5. Incompatible materials

• Mineral acids (non oxidizing and oxidizing), aliphatic and aromatic amines, azo and diazo compounds and hydrazines, caustics, cyanides, mercaptans, other organic sulfides, nitrides, organic peroxides and hydroperoxides,, strong oxidizing agents, strong reducing agents.

10.6. Hazardous decomposition products

• Thermal decomposition may produce Hydrogen bromide carbon monoxide and oxides of nitrogen, carbon dioxide & nitrogen, Hydrogen bromide gas and irritating and toxic fumes.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity

 2,6-Dibromopyridine is fatal if swallowed. It is irritating to skin, eyes and respiratory system. It is irritating to mucous membranes and upper respiratory tract.

Chronic Effects:

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

RTECS#: US7883000

Organism	Test Type	Route	Reported Dose
Albino Rat	LD50	Oral	31 mg/kg

Skin corrosion/irritation

: Causes skin irritation.



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Serious eye damage/irritation : Causes eye irritation.

Respiratory or skin sensitization : No data is available.

Germ cell Mutagenicity : No data is available.

Carcinogenicity : Not listed by NTP, IARC and OSHA.

Not present on the EU CMR list.

According to the information presently available 2,6-Dibromopyridine has not

been tested for its ability to cause cancer in animals.

Reproductive toxicity : No data is available.

STOT-single exposure : May cause respiratory irritation.

STOT- repeated exposure : No data available.

Aspiration Hazards : No data available.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity

Ecotoxicity:

LC50 – Daphnia (water flea) – 18 mg/L

12.2. Persistence and degradability

- 2,6-Dibromopyridine is expected to be persistent in the environment.
- It is not expected to be readily biodegradable in aerobic and anaerobic conditions.

12.3. Bioaccumulative potential(Predicted)

- BCF = 20
- Log Kow = 2.6

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.

12.4. Mobility in soil

- Log Koc= 1.937 (estimated). Low sorption.
- Henry's Law Constant= 1.1 X 10⁻⁰⁶ atm/m³ mole at 25 degrees. It is slightly volatile from aqueous bodies.
- Log Kow= 2.6 (estimated). Low potential to bioaccumulate.

12.5. Results of PBT and vPvB assessment

The substance does not meet the criteria for PBT or vPvB in accordance with Annex XIII

12.6. 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 slightly 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.
- 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.



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ADR/RID	IMDG	IATA
14.1 UN Number		
2811	2811	2811
TOXIC 6	TOXIC	TOXIC
14.2 UN Proper shipping name		
TOXIC SOLID, ORGANIC, N.O.S. (2,6-Dibromopyridine)	TOXIC SOLID, ORGANIC, N.O.S. (2,6-Dibromopyridine)	Toxic solid, organic, n.o.s. (2 Dibromopyridine)
14.3 Transport Hazard class (es)		i i
6.1	6.1	6.1
14.4 Packing Group		
II	II	II
14.5 Environmental hazards		
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environme

• It is not classified as dangerous to the environment. Based on the environmental modeling, this material has a moderate 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 15: REGULATORY INFORMATION

• European Union Information

Classification (as per Regulation (EC) No 1272/2008):

- Hazards Class and Category: Acute tox oral Cat 2, Skin Irrit. Cat.2, Eye irritant Cat 2, STOT SE Cat 3.
- Hazard Statements: H300; H315, H319, H335

Chemical Inventory Lists:	Status	
TSCA:	Not Listed	
EINECS:	Listed	
Canada(DSL/NDSL):	Not Listed	
Japan:	Not Listed	
Korea:	Not Listed	
Australia:	Listed	
China: IECSC	Not Listed	
Philippines	Listed	
New Zealand	Listed	
Taiwan	Listed	

US information

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

2,6-Dibromopyridine is not listed

SARA 302/304: 2,6-Dibromopyridine is not listed SARA 311/312: See section 2 for more information California Prop. 65: 2,6-Dibromopyridine is not listed CAA (Clean Air Act): 2,6-Dibromopyridine is not listed CWA (Clean Water Act): 2,6-Dibromopyridine is not listed



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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: 2,6-Dibromopyridine is not listed

SECTION 16: OTHER INFORMATION

a) Compilation information of safety data sheet

Date of compilation : March 26, 2018 Chemical : 2, 6-Dibromopyridine

CAS # : 626-05-1

File Name : 0206Gj Ghs04 Div.3 sds 2, 6-Dibromopyridine

Revision Number : 04

Date of Issue of SDS : February 16, 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 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.
- RTECS= Registry of Toxic Effects of Chemical Substances.
- NTP=National Toxicology Programm.
- 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.
- CSR=Chemical Safety Report.
- BCF = Bio Concentration Factor.
- DNEL = Derived No Effect Level.
- PNEC = Predicted No Effect Concentration.
- TLV = Threshhold 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.

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.
- REG (EC) no. 1907/2006, last modification by REG (EC) Nr. 830/2015...
- Reference: Archives of Environmental Contamination and Toxicology. Vol. 14, Pg. 111, 1985.

d) List of hazard statements

Hazards Statements	H300: Fatal if swallowed.
	H315: Causes skin irritation.
	H319 Causes serious eye irritation.
	H335 May cause respiratory irritation

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intented 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)