

Safety Data Sheet

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

Date of Compilation : August 30, 2013

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Version Name : 0731Gj Ghs03 Div.3 sds Butylpyridinium chloride

Supersedes date : February 26, 2021

Supersedes version : 0731Gj Ghs02 Div.3 sds Butylpyridinium chloride



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SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifier

PRODUCT NAME : Butylpyridinium chloride

CAS RN : 1124-64-7 FC# : 620-019-3

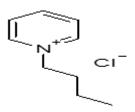
SYNONYMS : 1-Butylpyridinium chloride; N-Butylpyridinium chloride; N-N-Butylpyridinium chloride; 1-N-Butylpyridinium .

> . chloride : C₉H₁₄CIN

SYSTEMATIC NAME : 1-Butylpyridinium chloride

MOLECULAR FORMULA

STRUCTURAL FORMULA



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

1.2.1. Relevant identified uses

Butylpyridinum chloride is used for manufacturing of pharmaceuticals intermediates and for Research and Development purpose

1.2.2. 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

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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

Skin corrosion / irritation: Hazard category: Skin Irrit. 2 (H315: Causes skin irritation.)

Serious eye damage/ eye irritation: Hazard category: Eye Irrit. 2A (H319: Causes serious eye irritation.)

2.2. Label Elements

Hazard Pictogram:



Signal Word: Warning!

HAZARD AND PRECAUTIONARY STATEMENTS:

HAZARD STATEMENTS

H315: Causes skin irritation.

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H319: Causes serious eye irritation.

PRECAUTIONARY STATEMENTS

P264: Wash hands thoroughly after handling.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

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 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.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical	CAS#	EC#	Purity
Butylpyridinium chloride	1124-64-7	620-019-3	98% (minimum)

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

- Remove affected person from danger area. Do not leave affected persons unsupervised. Seek medical treatment. First aid personnel should
 pay attention to their own safety. Take off all contaminated clothing immediately
- 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.

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

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

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable: water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

5.2. Special hazards arising from the substance or mixture

 Hazardous decomposition products in case of fire: Hazardous decomposition products may be released during prolonged heating like smokes, carbon dioxide, nitrogen oxides and toxic fumes of HCI.

5.3. Advice for firefighters

- Precautionary measures fire: Appropriate self-contained breathing apparatus may be required.
- Firefighting instructions: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. In case of major fire, evacuate area.
- Protective equipment for firefighters: Do not enter fire area without proper protection equipment, including respiratory protection

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

- Spill should be handled by trained cleaning personnel properly equipped with respiratory and eye protection.
- Avoid breathing vapours, mist or gas. Avoid contact with skin and eyes.
- Wear protective clothing, full boots, impervious gloves, safety glasses and Self Contained Breathing Apparatus (SCBA), as may be deemed
 appropriate

6.2. Environmental precautions

Place waste in an appropriately labeled, sealed container for disposal. Care should be taken to avoid environmental release

6.3. Methods and materials for containment and cleaning up

- Clean up all spills immediately following relevant Standard Operating Procedures.
- Wipe up spillage or collect spillage using a high-efficiency vacuum cleaner. Avoid breathing vapours.



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Place spillage in appropriately labeled container for disposal. Wash spill site.

6.4. Reference to other sections

For disposal see section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

- Do not breathe dust, vapor or mist.
- 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.
- Handle in accordance with good industrial hygiene and safety procedures. Avoid Prolonged or repeated exposure. Take precautionary measures against electrostatic discharge

7.2. Storage

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

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parameters

Exposure Limits Values

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Butylpyridinium chloride	Not established	Not established	Not established

Exposure Limits (International):

Not available.

OSHA Vacated PELs:

No OSHA Vacated PELs are listed for this chemical.

8.2. Exposure controls

Appropriate Engineering Controls:

- General industrial hygiene practice.
- 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.

8.3. Personal Protection

- Hand Protection: Wear suitable gloves resistant to chemical penetration
- Eye Protection: Chemical safety goggles
- Body Protection: Wear suitable protective clothing.
- Respiratory protection: Where respirators are deemed necessary to reduce or control occupational exposure, use NIOSH-approved respiratory protection and have an effective respirator program in place.

Additional Information

- Only use protective equipment in accordance with national/international regulations. Follow the national regulation about wearing personal
 protective equipment and the warranty given.
- Apply skin protective barrier cream
- Do not inhale substances, work under hood.

Control of environmental exposure

- Do not let product enter drains.
- Wash hands and face after working with the substance.
- Under no circumstances eat or drink at the workplace.
- Do not inhale substances, work under hood.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

• Information on basic physical and chemical properties.

Sr.No.	Parameter	Typical value
1.	Appearance	White to off-white hygroscopic solid
2.	Molecular weight	171.5
3.	Odor	Not available
4.	Odor Threshold	Not available
5.	рН	6-7((16g/l water @20 °C)
6.	Melting point	131-132 °C



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7.	Boiling point	No data available
8.	Flash point	No data available
9.	Evaporation rate (n-BuAc=1)	Not applicable
10.	Flammability (Liquid)	Not applicable
11.	Upper/lower flammability or Explosive limits	Not available
12.	Vapor pressure	Not available
13.	Vapor density (air=1)	Not available
14.	Relative density	Not available
15.	Solubility	Highly soluble in water and Methanol, slightly soluble in Toluene MDC etc
16.	Partition coefficient (Octonol /water)	-3.09 (Estimated)
17.	Auto-ignition temperature	Not available.
18.	Decomposition temperature	Not available.
19.	Viscosity	Not available.
20.	Explosive property	Product does not present an explosion hazard
21.	Oxidizing property	Not available

SECTION 10: STABILITY AND REACTIVITY

- Reactivity: None known, based on information available
- Chemical Stability: Stable under normal conditions.
- Conditions to avoid: Incompatible materials
- Incompatible chemicals: Strong oxidizing agents, moisture.
- Hazardous decomposition: In fire conditions, Toxic vapors may be released on thermal decomposition including nitrogen oxides, carbon monoxide and irritating and toxic fumes of HCl.
- Hazardous Polymerization: Not reported.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity.

RTECS # Not available

Acute Oral Rat: LD50: Not available

Skin corrosion/irritation : Causes skin irritation.

Serious eye damage/irritation : Causes serious eye irritation.

Respiratory or skin sensitization : No data available.

Germ cell Mutagenicity : No data available.

Carcinogenicity : Not listed by NTP, IARC and OSHA.

Reproductive toxicity : No data available.

STOT-single exposure : No data available.

STOT- repeated exposure : No data available .

Aspiration Hazards : No data available.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

12.1.1Ecotoxicity:

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Fathead minnow LC₅₀ (96 hr): Not data available

12.2. Persistence and degradability

Not readily biodegradable. It is estimated to be persistent in the environment

12.3. Bio accumulative potential

- BCF = 3.162 (Estimated)
- Log Kow = -3.09 (Estimated)

The estimated bio concentration factor (BCF) for Butylpyridinium chloride, 3.162, does not exceed the EPA bio concentration criteria, therefore as per estimation Butylpyridinium chloride is not expected to bio accumulate in the food chain because and it does not exceed the BCF criteria

12.4. Mobility in soil

- Henry's Law Constant = 3.52E-010 atm-m3/mole at 25 degrees
- Log Kow = 3.09 (Estimated)

12.5. Other adverse effects

Environment Fate:

Based on the environmental modeling, this material has a low potential to get moderate absorbed in the organic matter of soil and persistent in the environment. 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

Contact a licensed professional waste disposal service to dispose of this material.
 Dispose in a safe manner in accordance with local/national regulation. Observe all federal, state and local environmental regulation.

SECTION 14: TRANSPORT INFORMATION

 This substance is considered to be non-Hazardous for transport by Air/Rail/Road and Sea and thus not regulated by IATA/ICAO/US DOT /IMO/IMDG.

ADR/ R	RID/ DOT	IMDG	IATA
14.1.	UN number		
	Not applicable	Not applicable	Not applicable
14.2.	14.2. UN proper shipping name		
	Not dangerous goods	Not dangerous goods	Not dangerous goods
14.3. Transport hazard class(es)			
	Not applicable	Not applicable	Not applicable
14.4.	14.4. Packing group		
	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards			
Dangerous for the environment : No		Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No
No supplementary information available			

SECTION 15: REGULATORY INFORMATION

Classification as per CLP Regulation 1272/2008:

- Hazards Class and Category:
- Skin Corrosion/irritation: Category 2
- Serious eye damage/irritation: Category 2

Hazard Statements: H315; H319

Chemical Inventory Lists:	Status
TSCA:	Not Listed
EC Inventory	620-019-3



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Canada(DSL/NDSL):	Not Listed
China Catalog of Hazardous chemicals 2015	Not Listed
New Zealand Inventory of Chemicals (NZIoC)	Not Listed
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	Not Listed
China: IECSC	Not Listed
Australian Inventory of Chemical Substances (AICS)	Not Listed

SECTION 16: OTHER INFORMATION

a) Compilation information of safety data sheet

Date of compilation : August 30, 2013

Chemical : Butylpyridinium chloride

CAS # : 1124-64-7

File Name : 0731Gj Ghs03 Div.3 sds Butylpyridinium chloride

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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.
- 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.
- 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.

c) Key Literature reference and sources for data



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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

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)

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