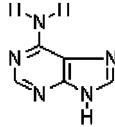
Adenine -MATERIAL SAFETY DATA SHEET

Manufacturer/information service:

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1. Chemical Product Identification

Product Name: Adenine Molecular Formula: C₅H₅N₅ Molecular Weight: 135.12 Structural Formula:



Chemical Name: 6-Aminopurine Form: Powder Color: White Odor: Odorless CAS No.: 73-24-5

2. Composition / Information on Ingredients

Composition	CAS No.	Content %
Adenine	73-24-5	99.0
Other ingredients		1.0

3. Hazards Identification

Emegerancy overview: Harmful by inhalation, in contact with skin and if swallowed.

Category of Danger:

Harmful

Principle routes of exposure: Skin

Inhalation: Harmful by inhalation.

Ingestion: Harmful if swallowed.

Skin contact: Harmful in contact with skin.

Eye contact: Risk of serious damage to eyes

Statements of hazard harmful if swallow. May be harmful if absorbed through skin or inhaled..

Statement of Spill or Leak - ANSI Label Eliminate all ignition sources. Absorb and/or contain spill with inert materials

(e.g., sand, vermiculite). Then place in appropriate container. For large spills, use water spray to disperse vapors, flush

spill area. Prevent runoff from entering waterways or sewers.

Statement of First Aid If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give

anything by mouth to an unconscious person. Call a physician.

Precautions - Do not taste or swallow. Wash thoroughly after handling.

4. First Aid Measures

General advice: In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Inhalation: Move to fresh air. Call a physician immediately.

Skin contact: Rinse immediately with plenty of water and seek medical advice

Ingestion: Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Consult a physician.

Eye contact: In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Protection of first-aiders: No information available.

Medical conditions aggravated by exposure: None known

5. Fire-Fighting Measures

Suitable extinguishing media: Use dry chemical, CO2, water spray or "alcohol" foam

Specific hazards: Burning produces irritant fumes.

Unusual hazards: None known

Special protective equipment for firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, and full protective gear

Specific methods: Water mist may be used to cool closed containers.

Flash point: Not determined

Autoignition temperature: Not determined.

6. Accidental Release Measures

Personal precautions: Use personal protective equipment.

Environmental precautions: Prevent product from entering drains.

Methods for cleaning up: Sweep up and shovel into suitable containers for disposal.

7. Handling And Storage

Storage: Room temperature

Handling: Use only in area provided with appropriate exhaust ventilation.

Safe handling advice: Wear personal protective equipment.

Technical measures/storage conditions: Keep containers tightly closed in a cool, well-ventilated place.

Incompatible products: Oxidising and spontaneously flammable products.

8. Exposure Controls/Personal Protection

Personal protective equipment

Respiratory protection: Breathing apparatus only if aerosol or dust is formed.

Hand protection: Pvc or other plastic material gloves

Skin and body protection: Usual safety precautions while handling the product will provide adequate protection against this potential effect.

Eye protection: Safety glasses with side-shields

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice.

9. Physical and Chemical Properties

Melting point/range: >360°C Boiling point/range: No Data available at this time. Density: No data available Vapor pressure: No data available Evaporation rate: No data available Vapor density: No data available Solubility (in water): Insoluble Flash point: Not determined Autoignition temperature: Not determined

10. Stability and Reactivity

Stability: Stable under recommended storage conditions.

Polymerization: None under normal processing.

Hazardous decomposition products: Nitrogen oxides (NOx)/ammonia/CN

Materials to avoid: Strong oxidising agents

Conditions to avoid: Exposure to air or moisture over prolonged periods.

11. Toxicological Information

Product Information

Acute toxicity: Oral LD50 Rat : 227 mg/kg; Oral LD50 Mouse : 783 mg/kg

Chronic toxicity: Chronic exposure may cause nausea and vomiting, higher exposure causes unconsciousness.

Local effects: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Specific effects: May include moderate to severe erythema (redness) and moderate edema (raised skin), nausea, vomiting, headache.

Primary irritation: No data is available on the product itself.

Carcinogenic effects: No data is available on the product itself.

Mutagenic effects: No data is available on the product itself.

Reproductive toxicity: No data is available on the product itself.

12. Ecological And Ecotoxicological Information

Ecotoxicity: No data available. No information available. Environmental: No information Other: No information available.

13. Disposal Considerations

Waste from residues/unused products: Waste disposal must be in accordance with appropriate Federal, State, and local regulations. This product, if unaltered by use, may

be disposed of by treatment at a permitted facility or as advised by your local hazardous waste regulatory authority. Residue from fires extinguished with this material may be hazardous.

Contaminated packaging: Do not re-use empty containers

14. Transport Information

Not applicable.

15. Regulatory Information

Not applicable.

16. Other Information

All information and instructions provided in this Material Safety Data Sheet (MSDS) are based on the current state of scientific and technical knowledge at the date indicated on the present MSDS and are presented in good faith and believed to be correct. This information applies to the product as such. In case of new formulations or mixes, it is necessary to ascertain that a new danger will not appear. It is the responsibility of persons on receipt of this MSDS to ensure that the information contained herein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. If the recipient subsequently produce formulations containing this product, it is the recipients sole responsibility to ensure the transfer of all relevant information from this MSDS to their own MSDS.