Matrix Scientific

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SAFETY DATA SHEET

Transportation Emergency: 3E Co. (5025) 800-451-8346

1. Product Identification

Name Piperazine-1,4-diamine

Catalog Number	324549
CAS Registry Number	[106-59-2]
Company	Matrix Scientific
Physical Address	131 Pontiac Business Center Drive Elgin, SC 29045 USA
Telephone/Fax	(803)788-9494/(803)788-9419

2. Hazard Identification

Hazardous Ingredients Piperazine-1,4-diamine

GHS label elements, including precautionary statements

Pictogram

Signal word WARNING

Hazard statement(s)

H317	H317 May cause an allergic skin reaction
H319	H319 Causes serious eye irritation

Precautionary statement(s)

P280	Wear protective gloves/protective clothing/eye protection/face protection.
P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.

3. Composition, Information or Ingredients

Name Piperazine-1,4-diamine

4. First Aid Measures

Eye Contact: Check for and remove any contact lenses. Immediately flush

	eyes with clean, running water for at least 15 minutes while keeping eyes open. Cool water may be used. Seek medical attention.
Skin Contact:	After contact with skin, wash with generous quantities of running water. Gently and thoroughly wash affected area with running water and non-abrasive soap. Cool water may be used. Cover the affected area with emollient. Seek medical attention. Wash any contaminated clothing prior to reusing.
Inhalation:	Remove the victim from the source of exposure to fresh, uncontaminated air. If victim's breathing is difficult, administer oxygen. Seek medical attention.
Ingestion:	Do NOT induce vomiting. Give water to victim to drink. Seek medical attention.

5. Fire-Fighting Measures

Extinguishing media:	Carbon dioxide, dry chemical powder, alcohol or polymer foam.
Special fire fighting procedures:	Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
Unusual fire and explosion hazards/ decomposition of product:	Emits toxic fumes under fire conditions.

6. Accidental Release Measures

Steps to be taken if material is spilled or otherwise released into the environment - Wear Appropriate respirator, impervious boots and heavy rubber (or otherwise impervious) gloves. Scoop up solid material or absorb liquid material and place into appropriate container. Ventilate area and wash affected spill area after pickup is complete. Wash skin immediately with plenty of water. Place solid or absorbed material into containers and close for disposal.

7. Handling and Storage

Avoid prolonged exposure.
Use caution when handling.
Exposure to any chemical should be limited.
Do not breath dust or vapor.
Have safety shower and eye wash available.
Do not get in eyes, on skin or on clothing.
Keep container tightly closed.
Store in a cool, dry, well-ventilated place.
Ensure adequate ventilation during use.
Use only in a chemical fume hood.
To the best of our knowledge, the health hazards of this product have not been fully investigated.
This product is provided solely for the purpose of research and development.

8. Exposure Controls and Personal Protection

Wear Protective safety goggles.
Wear chemical-resistant gloves.
Wear protective clothing and chemical resistant boots.
Ensure ventilation during use.
After contact with skin, wash immediately.

9. Physical and Chemical Properties

Molecular Formula: C4H12N4
Molecular Weight: 116.17

10. Stability and Reactivity

Incompatibilities: Strong oxidizing agents
Strong acids and bases

Hazard Decomposition Products

Carbon	carbon monoxide
	carbon dioxide
Nitrogen	oxides of nitrogen

11. Toxicological Information

Acute effects:
Irritant
May be harmful by ingestion and inhalation.
Material is irritating to mucous membranes and upper respiratory tract.
To the best of our knowledge, the toxicological properties of this product have not been fully investigated or determined.

12. Ecological Information

Mobility:	Data not known
Persistence and degradability:	No data available
Cumulative potential:	No data available
Other adverse effects:	No data available

13. Disposal Considerations

Absent other actions demanded by federal or local regulations - Dissolve or mix the material with a combustible solvent and burn in a requlated, chemical incinerator equipped with after burner and scrubber.
Observe all federal, state and local laws.

14. Transport Information

Shipping Name Classed non-hazardous for shipment

15. Regulatory Information

Adhere to all Federal, State and local regulations.

16. Other Information

The information contained herein is accurate to the best of our knowledge, but is not meant to be complete and is included only as a guide. The end user is responsible for any damage resulting from handling or from contact with this product.