SAFETY DATA SHEET



Order Customer Number Number

1. Identification of the substance/preparation and of the company/undertaking

Product name : Histamine, Free Base Catalog # : 3779

Supplier : Manufactured by EMD Biosciences, Inc.

10394 Pacific Center Court San Diego, CA 92121 (858)450-5558/(800)854-3417

FAX: (858)453-3552

Synonym : 2-(4-Imidazolyl)ethylamine

 $C_5H_9N_3$

Chemical formula

Emergency

Call Chemtrec®

telephone number (800)424-9300 (within U.S.A.) (703)527-3887 (outside U.S.A.)

2. Composition / information on ingredients

Substance/Preparation : Substance

Chemical name*	CAS No.	EC Number	Symbol	R-Phrases
1) 2-(4-Imidazolyl)ethylamine	51-45-6	200-100-6	Xn	R22, R36/37/38, R42/43

3. Hazards identification

Physical/chemical hazards : Not applicable.

Human health hazards : WARNING!

MAY BE HARMFUL IF SWALLOWED.

MAY CAUSE RESPIRATORY TRACT, EYE AND SKIN IRRITATION. MAY CAUSE ALLERGIC RESPIRATORY AND SKIN REACTION. MAY CAUSE DAMAGE TO THE FOLLOWING ORGANS: LUNGS,

GASTROINTESTINAL TRACT, CARDIOVASCULAR SYSTEM, RESPIRATORY

TRACT, SKIN, HEAD.

4. First-aid measures

First-Aid measures

Ingestion

Inhalation : If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Get medical attention.

: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen

tight clothing such as a collar, tie, belt or waistband.

Skin Contact : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used.Wash

clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

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: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention.

Effects and symptoms

Eye Contact

Inhalation : Hazardous in case of inhalation (lung irritant, lung sensitizer).

Ingestion : Hazardous in case of ingestion.

Skin Contact : Hazardous in case of skin contact (irritant, sensitizer). Skin inflammation is characterized by itching, scaling,

reddening, or, occasionally, blistering.

Eye Contact: Hazardous in case of eye contact (irritant).

Aggravating conditions : Repeated or prolonged exposure is not known to aggravate medical condition.

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Fire-fighting measures

Flammability of the Product

Extinguishing Media

: May be combustible at high temperature.

Suitable SMALL FIRE: Use DRY chemical powder.

LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

products

Hazardous thermal (de)composition: These products are carbon oxides (CO, CO2), nitrogen oxides (NO, NO2...).

Special fire-fighting procedures

: Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

Protection of fire-fighters : Be sure to use an approved/certified respirator or equivalent.

Accidental release measures

Personal precautions

: Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Small Spill and Leak

Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill and Leak

Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system

7. Handling and storage

Handling

: Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe dust. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents.

Storage

: Keep container tightly closed. Keep container in a cool, well-ventilated area. Do not store above 4°C (39.2°F).

Packaging materials

Recommended use : Use original container.

Exposure controls/personal protection

Engineering measures

: Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Hygiene measures

Wash hands, forearms, and face thoroughly after handling compounds and before eating, smoking, using lavatory, and at the end of day.

Ingredient Name

Not available.

Occupational Exposure Limits

1) Histamine, Free Base

Personal protective equipment

Respiratory system

Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.

Skin and body

Lab coat.

Hands

Gloves.

Eves

Splash goggles.

Protective Clothing (Pictograms)



Physical and chemical properties

Physical state

Color

: Solid. (Solid powder.)

Off-white.

Molecular Weight

111.2 g/mole

Melting Point

83 to 84°C (181.4 to 183.2°F)

Solubility

Soluble in cold water.

Flash point

Not available.

Explosive properties

Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

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10. Stability and reactivity

Stability : The product is stable.

Conditions to avoid Hygroscopic; keep container tightly closed. Sensitive to light.

Reactive with oxidizing agents. Materials to avoid

Hazardous Decomposition Products: These products are carbon oxides (CO, CO2), nitrogen oxides (NO, NO2...).

11. Toxicological information

RTECS# : MS1050000

Local effects

Skin irritation Hazardous in case of skin contact (irritant).

Sensitization Hazardous in case of skin contact (sensitizer), of inhalation (lung sensitizer).

LD50: Not available. Acute toxicity

LC50: Not available.

Repeated or prolonged exposure is not known to aggravate medical condition. Chronic toxicity

Other Toxic Effects on Not available.

Humans Hazardous in case of skin contact (irritant, sensitizer), of ingestion, of inhalation (lung irritant, lung

sensitizer). Not available.

Material is irritating to mucous membranes and upper respiratory tract. Exposure can cause nausea,

headache and vomiting.

Carcinogenic effects Not available. **Mutagenic effects** Not available. Reproduction toxicity Not available Teratogenic effects Not available

Ecological information 12.

: Not available. **Ecotoxicity**

Toxicity of the Products of : The products of degradation are less toxic than the product itself.

Biodegradation

13. Disposal considerations

Methods of disposal; Waste of residues; Contaminated packaging : Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Transport information

International transport regulations

Land - Road/Railway

ADR/RID Class : Not controlled under ADR (Europe).

<u>Sea</u>

<u>Air</u>

IMDG Class : Not controlled under IMDG.

IATA-DGR Class Not controlled under IATA.

Special Provisions for Not applicable.

Transport

Regulatory information

EU Regulations

Hazard symbol(s)



Classification : Harmful

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R22- Harmful if swallowed. Risk Phrases

> R36/37/38- Irritating to eyes, respiratory system and skin. R42/43- May cause sensitization by inhalation and skin contact.

: S22- Do not breathe dust.

S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36/37- Wear suitable protective clothing and gloves.

Contains

: - Histamine, Free Base

U.S. Federal Regulations

Safety Phrases

TSCA 8(b) inventory: Histamine, Free Base

SARA 302/304/311/312 extremely hazardous substances: No products were found. SARA 302/304 emergency planning and notification: No products were found.

SARA 302/304/311/312 hazardous chemicals: No products were found.

SARA 311/312 MSDS distribution - chemical inventory - hazard identification: No products were found.

SARA 313 toxic chemical notification and release reporting: No products were found.

Clean Water Act (CWA) 307: No products were found. Clean Water Act (CWA) 311: No products were found.

Clean air act (CAA) 112 accidental release prevention: No products were found. Clean air act (CAA) 112 regulated flammable substances: No products were found. Clean air act (CAA) 112 regulated toxic substances: No products were found.

HCS Classification

CLASS: Irritating substance. CLASS: Sensitizing substance.

State Regulations

WHMIS (Canada)

: CLASS D-1B: Material causing immediate and serious toxic effects (TOXIC).

CLASS D-2A: Material causing other toxic effects (VERY TOXIC).

CEPA DSL: Histamine, Free Base

16. Other information

Hazardous Material Information System (U.S.A.)



National Fire Protection Association (U.S.A.)



Fire Hazard

Notice to Reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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