

**Order
Number**
**Customer
Number**
1. Identification of the substance/preparation and of the company/undertaking

Product name : Amiloride, Hydrochloride **Catalog #** : 129876
Supplier : EMD Biosciences, Inc.
 10394 Pacific Center Court
 San Diego, CA 92121
 PHONE: (858)450-5558/(800)854-3417
 FAX: (858)453-3552

Chemical formula : C₈H₈ClN₇O · HCl

Synonym : N-AMIDINO-3,5-DIAMINO-6-CHLOROPYRAZINECARBOXAMI
 MONOHYDROCHLORIDE

Emergency telephone number : **Call Chemtrec®**
(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) Amiloride, Hydrochloride	2016-88-8	217-958-2	T	R25

3. Hazards identification

Physical/chemical hazards : Not applicable.
Human health hazards : WARNING!
 HARMFUL IF SWALLOWED.
 MAY CAUSE DAMAGE TO THE FOLLOWING ORGANS: BLOOD,
 GASTROINTESTINAL TRACT, SKIN, HEAD, MUSCLE TISSUE.

4. First-aid measures
First-Aid measures

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

Ingestion : If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

Skin Contact : In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

Eye Contact : 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

Ingestion : Very hazardous in case of ingestion. May be fatal if swallowed.

Aggravating conditions : Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

5. Fire-fighting measures

Flammability of the Product : Non-flammable.

Extinguishing Media

Suitable : Not applicable.

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

6. Accidental release measures

- Personal precautions** : Splash goggles. Full suit. Boots. Gloves. 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.
- Large Spill and Leak** : Poisonous solid.
Stop leak if without risk. Do not get water inside container. Do not touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal.

7. Handling and storage

- Handling** : Keep locked up. Do not ingest. Do not breathe dust. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label.
- Storage** : Keep container tightly closed. Keep container in a cool, well-ventilated area. Do not store above 20°C (68°F).
- Packaging materials**
- Recommended use** : Use original container.

8. 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.

<u>Ingredient Name</u>	<u>Occupational Exposure Limits</u>
1) Amiloride, Hydrochloride	Not available.

Personal protective equipment

- Respiratory system** : Wear appropriate respirator when ventilation is inadequate.
- Skin and body** : Lab coat.
- Eyes** : Safety glasses.
- Protective Clothing (Pictograms)** :



9. Physical and chemical properties

- Physical state** : Solid.
- Color** : Yellow. (Light.)
- Molecular Weight** : 266.1 g/mole
- Melting Point** : 293°C (559.4°F)
- Solubility** : Easily soluble in cold water.
- Flash point** : Not applicable.
- 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.

10. Stability and reactivity

- Stability** : The product is stable.
- Conditions to avoid** : Sensitive to light.

11. Toxicological information

RTECS # : **UQ2275500**

Local effects

Skin irritation : Not available.

Acute toxicity : LD50: Not available.
LC50: Not available.

Chronic toxicity : Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

Other Toxic Effects on Humans

: Toxic for humans or animal life.
Very hazardous in case of ingestion

Not available.

Exposure can cause nausea, headache and vomiting.

Carcinogenic effects : Not available.

Mutagenic effects : Not available.

Reproduction toxicity : Not available.

Teratogenic effects : Not available.

12. Ecological information

Ecotoxicity : Not available.

Toxicity of the Products of Biodegradation : The products of degradation are as toxic as the product itself.

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.

14. Transport information

International transport regulations

UN number : UN2811

Land - Road/Railway

Proper shipping name : Toxic solid, organic, n.o.s.*

ADR/RID Class : CLASS 6.1: Toxic substance.

Packing Group : II

ADR/RID label :



Sea

Proper shipping name : Toxic solid, organic, n.o.s.*

IMDG Class : CLASS 6.1: Toxic substance.

Packing Group : II

IMDG label :



Air

Proper shipping name : Toxic solid, organic, n.o.s.*

UN/ID Number : UN2811

IATA-DGR Class : CLASS 6.1: Toxic substance.

IATA label :



Special Provisions for Transport : Not available.

15. Regulatory information

EU Regulations

Hazard symbol(s)

:



Classification

: Toxic

Risk Phrases

: R25- Toxic if swallowed.

Safety Phrases

: S36- Wear suitable protective clothing.
S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Contains

: - Amiloride, Hydrochloride

U.S. Federal Regulations

: TSCA: No products were found.
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: Toxic.
CLASS: Target organ effects.

State Regulations

:

WHMIS (Canada)

: CLASS D-1A: Material causing immediate and serious toxic effects (VERY TOXIC).
No products were found.

16. Other information

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

Health	*	0
Fire Hazard		0
Reactivity		0
Personal Protection		a

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



Notice to Reader

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Date of issue

Catalog # 129876

3/4/2003.

Page: 4/4