MATERIAL SAFETY DATA SHEET

Date Printed: 08/09/2007 Date Updated: 06/06/2006

Version 1.6

Section 1 - Product and Company Information

Product Name (AMINOOXY) ACETIC ACID HEMIHYDROCHLORIDE

Product Number A4508 Brand SIGMA

Company Sigma-Aldrich Canada, Ltd Address 2149 Winston Park Drive

Oakville ON L6H 6J8 CA

Technical Phone: 9058299500 9058299292 Fax: 800-424-9300 Emergency Phone:

Section 2 - Composition/Information on Ingredient

Substance Name SARA 313 CAS #

2921-14-4 (AMINOOXY) ACETIC ACID No

HEMIHYDROCHLORIDE

Formula C2H5NO3 · 0.5HCl

Synonyms Aminooxyacetic acid hemichloride

RTECS Number: AF3150000

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Irritant.

Irritating to eyes, respiratory system and skin.

For additional information on toxicity, please refer to Section 11.

Section 4 - First Aid Measures

ORAL EXPOSURE

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

INHALATION EXPOSURE

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

DERMAL EXPOSURE

In case of contact, immediately wash skin with soap and copious amounts of water.

EYE EXPOSURE

In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes.

Section 5 - Fire Fighting Measures

FLASH POINT

AUTOIGNITION TEMP N/A

FLAMMABILITY

N/A

EXTINGUISHING MEDIA

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

FIREFIGHTING

Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Specific Hazard(s): Emits toxic fumes under fire conditions.

EXPOSURE HAZARD(S)

Material: Irritant.

Section 6 - Accidental Release Measures

PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

METHODS FOR CLEANING UP

Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

Section 7 - Handling and Storage

HANDLING

User Exposure: Avoid breathing dust. Avoid contact with eyes, skin, and clothing.

STORAGE

Suitable: Keep container closed.

SPECIAL REQUIREMENTS

Hygroscopic.

Section 8 - Exposure Controls / PPE

ENGINEERING CONTROLS

Mechanical exhaust required.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory: Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator.

Hand: Compatible chemical-resistant gloves.

Eye: Chemical safety goggles.

GENERAL HYGIENE MEASURES

Wash thoroughly after handling. Wash contaminated clothing before reuse.

Section 9 - Physical/Chemical Properties

Color: White Appearance Form: Fine crystals Property Value At Temperature or Pressure Molecular Weight 109.3 AMU N/AрΗ BP/BP Range N/A150 °C MP/MP Range Freezing Point N/AVapor Pressure N/AVapor Density N/ASaturated Vapor Conc. N/A SG/Density N/ABulk Density N/AOdor Threshold N/A Volatile% N/A VOC Content N/AWater Content N/ASolvent Content N/AEvaporation Rate N/AViscosity N/ASurface Tension N/APartition Coefficient N/A Decomposition Temp. N/AFlash Point N/AExplosion Limits N/A Flammability N/AAutoignition Temp N/ARefractive Index N/A

N/A = not available

Optical Rotation

Miscellaneous Data

Section 10 - Stability and Reactivity

STABILITY

Solubility

Conditions of Instability: Moisture.

Conditions to Avoid: Moisture.

Materials to Avoid: Strong oxidizing agents.

N/A

N/A

N/A

HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide, Nitrogen oxides, Hydrogen chloride gas.

Section 11 - Toxicological Information

ROUTE OF EXPOSURE

Inhalation: Material is irritating to mucous membranes and upper respiratory tract.

Multiple Routes: Causes eye and skin irritation. May be harmful by inhalation, ingestion, or skin absorption.

SIGNS AND SYMPTOMS OF EXPOSURE

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

TOXICITY DATA

Intraperitoneal Mouse 65 MG/KG LD50

Subcutaneous Mouse 91 MG/KG LD50

Remarks: Sense Organs and Special Senses (Nose, Eye, Ear, and Taste):Eye:Ptosis. Behavioral:Somnolence (general depressed activity). Skin and Appendages: Other: Hair.

Section 12 - Ecological Information

No data available.

Section 13 - Disposal Considerations

APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION
Dissolve or mix the material with a combustible solvent and burn
in a chemical incinerator equipped with an afterburner and
scrubber. Observe all federal, state, and local environmental
regulations.

Section 14 - Transport Information

DOT

Proper Shipping Name: None Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

IATA

Non-Hazardous for Air Transport: Non-hazardous for air transport.

Section 15 - Regulatory Information

EU ADDITIONAL CLASSIFICATION

Symbol of Danger: Xi

Indication of Danger: Irritant.

R: 36/37/38

Risk Statements: Irritating to eyes, respiratory system and skin.

S: 26-36

Safety Statements: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

US CLASSIFICATION AND LABEL TEXT

Indication of Danger: Irritant.

Risk Statements: Irritating to eyes, respiratory system and skin. Safety Statements: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

UNITED STATES REGULATORY INFORMATION

SARA LISTED: No

TSCA INVENTORY ITEM: Yes

CANADA REGULATORY INFORMATION

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS

contains all the information required by the CPR.

DSL: Yes NDSL: No

Section 16 - Other Information

DISCLAIMER

For R&D use only. Not for drug, household or other uses.

WARRANTY

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any quarantee of the properties of the product. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2007 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.