MATERIAL SAFETY DATA SHEET

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Version 1.2

Section 1 - Product and Company Information

Product Name UROCANIC ACID, 99%

Product Number 859796
Brand ALDRICH

Company Sigma-Aldrich Canada, Ltd Street Address 2149 Winston Park Drive City, State, Zip, Country Oakville ON L6H 6J8 CA

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

Section 2 - Composition/Information on Ingredient

Substance Name CAS # SARA 313 4-IMIDAZOLEACRYLIC ACID 104-98-3 No

Formula C6H6N2O2

Synonyms Imidazoleacrylic acid * 5-Imidazoleacrylic acid *

3-(1H-Imidazol-4-yl)-2-propenoic acid *

2-Propenoic acid, 3-(1H-imidazol-4-yl)- (9CI) *

Urocanic acid * Urocaninic acid

RTECS Number: NI3425200

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Caution: Avoid contact and inhalation.

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

Contamination of the eyes should be treated by immediate and prolonged irrigation with copious amounts of water.

INFORMATION FOR PHYSICIAN

Contamination of the eyes should be treated by immediate and

prolonged irrigation with copious amounts of water.

Section 5 - Fire Fighting Measures

EXPLOSION DATA

Dust Potential: This material, like most materials in powder form, is capable of creating a dust explosion.

FLASH POINT

N/A

AUTOIGNITION TEMP

N/A

FLAMMABILITY

N/A

EXTINGUISHING MEDIA

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

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.

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 contact and inhalation. Avoid prolonged or repeated exposure.

STORAGE

Suitable: Keep container closed. Store in a cool dry place.

Section 8 - Exposure Controls / PPE

ENGINEERING CONTROLS

Safety shower and eye bath. Mechanical exhaust required.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory: Government approved respirator.

Hand: Rubber gloves.

Eye: Chemical safety goggles.

GENERAL HYGIENE MEASURES

Wash contaminated clothing before reuse. Wash thoroughly after handling.

Section 9 - Physical/Chemical Properties

Appearance Color: White Form: Powder

Property Value At Temperature or Pressure

Molecular Weight 138.13 AMU рН N/ABP/BP Range N/A MP/MP Range 230 °C Freezing Point N/AVapor Pressure N/AVapor Density N/A Saturated Vapor Conc. N/A Bulk Density N/AN/AOdor Threshold N/AVolatile% N/AVOC Content N/AWater Content N/ASolvent Content N/AEvaporation Rate N/AViscosity N/ASurface Tension N/APartition Coefficient N/A Decomposition Temp. N/A Flash Point N/AExplosion Limits N/A Flammability N/AAutoignition Temp N/ARefractive Index N/AOptical Rotation N/AMiscellaneous Data N/A Solubility N/A

N/A = not available

Section 10 - Stability and Reactivity

STABILITY

Materials to Avoid: Bases, Oxidizing agents, Reducing agents.

HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide, Nitrogen oxides.

Section 11 - Toxicological Information

ROUTE OF EXPOSURE

Multiple Routes: May be harmful by inhalation, ingestion, or skin absorption. May cause irritation.

SIGNS AND SYMPTOMS OF EXPOSURE

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

TOXICITY DATA

Intravenous Mouse 100 MG/KG LD50

CHRONIC EXPOSURE - MUTAGEN

Species: Human Dose: 1 MMOL/L

Cell Type: Other cell types Mutation test: DNA inhibition

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.

TATA

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

Section 15 - Regulatory Information

EU ADDITIONAL CLASSIFICATION

S: 22 24/25

Safety Statements: Do not breathe dust. Avoid contact with skin and eyes.

US CLASSIFICATION AND LABEL TEXT

US Statements: Caution: Avoid contact and inhalation.

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: No NDSL: Yes

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

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