Date Printed: 06/26/2009 Date Updated: 08/19/2008 Version 1.5

SIGMA-ALDRICH MATERIAL SAFETY DATA SHEET Section 1 - Product and Company Information Product Name 3-METHYL-L-HISTIDINE M9005 Product Number Brand SIGMA Sigma-Aldrich Canada, Ltd Company 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 CAS # SARA 313 3-METHYL-L-HISTIDINE 368-16-1 Formula C7H11N3O2 Section 3 - Hazards Identification EMERGENCY OVERVIEW Irritant. Irritating to eyes, respiratory system and skin. HMIS RATING HEALTH: 2 FLAMMABILITY: 0 REACTIVITY: 0 NFPA RATING HEALTH: 2 FLAMMABILITY: 0 REACTIVITY: 0 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 N/A AUTOIGNITION TEMP 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 self-contained breathing apparatus, 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. Do not get in eyes,

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

Section 9 - Physical/Chemical Properties

Eye: Chemical safety goggles.

Section 8 - Exposure Controls / PPE

on skin, on clothing.

ENGINEERING CONTROLS

respirator.

reuse.

Appearance

Bulk Density Odor Threshold

Water Content

Solvent Content

Surface Tension

Evaporation Rate

Decomposition Temp.

Explosion Limits

Autoignition Temp

Volatile%

Viscosity

Flash Point

Flammability

VOC Content

Hand: Rubber gloves.

GENERAL HYGIENE MEASURES

Saturated Vapor Conc. N/A

Partition Coefficient N/A

STORAGE

SIGMA - M9005 www.sigma-aldrich.com

N/A

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

Safety shower and eye bath. Mechanical exhaust required.

appropriate use a dust mask type N95 (US) or type P1 (EN 143)

Wash thoroughly after handling. Wash contaminated clothing before

Page 2

Value Property At Temperature or Pressure Molecular Weight 169.18 AMU рΗ N/A BP/BP Range N/A 254 °C MP/MP Range Freezing Point N/A Vapor Pressure N/A Vapor Density N/A

Physical State: Solid

Refractive Index N/A Optical Rotation N/A Miscellaneous Data N/A Solubility N/A N/A - not available Section 10 - Stability and Reactivity STABILITY Materials to Avoid: Strong oxidizing agents. HAZARDOUS DECOMPOSITION PRODUCTS Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide, Nitrogen oxides. 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. Section 12 - Ecological Information No data available. SIGMA - M9005 www.sigma-aldrich.com Page 3

immediately with plenty of water and seek medical advice. Wear suitable protective clothing. US CLASSIFICATION AND LABEL TEXT

Indication of Danger: Irritant.

suitable protective clothing.

UNITED STATES REGULATORY INFORMATION

CANADA REGULATORY INFORMATION

Section 15 - Regulatory Information

Indication of Danger: Irritant.

EU ADDITIONAL CLASSIFICATION Symbol of Danger: Xi

Section 13 - Disposal Considerations

Section 14 - Transport Information

Proper Shipping Name: None

regulations.

transport.

R: 36/37/38

SARA LISTED: No

WARRANTY

SIGMA - M9005

s: 26-36

DOT

APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION

Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

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

Safety Statements: In case of contact with eyes, rinse

Safety Statements: In case of contact with eyes, rinse

Dissolve or mix the material with a combustible solvent and burn

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

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

immediately with plenty of water and seek medical advice. Wear

in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental

accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR. DSL: No NDSL: No Section 16 - Other Information For R&D use only. Not for drug, household or other uses.

The above information is believed to be correct but does not

appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc.,

knowledge and is applicable to the product with regard to

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

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.

www.sigma-aldrich.com

Page 4

Page 5

WHMIS Classification: This product has been classified in

Copyright 2009 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.