## MATERIAL SAFETY DATA SHEET

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SARA 313

Product Name 2,2-DIMETHYLSUCCINIC ACID, 99%

Section 1 - Product and Company Information

Product Number D186007 Brand ALDRICH

Sigma-Aldrich Canada, Ltd Company

Address 2149 Winston Park Drive Oakville ON L6H 6J8 CA 9058299500 Technical Phone: 9058299292 Fax:

800-424-9300 Emergency Phone: Section 2 - Composition/Information on Ingredient

Formula C6H10O4

Section 3 - Hazards Identification

597-43-3

Irritant. Irritating to eyes, respiratory system and skin.

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

EMERGENCY OVERVIEW

Substance Name

2,2-DIMETHYLSUCCINIC ACID

Section 4 - First Aid Measures ORAL EXPOSURE

conscious. Call a physician. INHALATION EXPOSURE

If swallowed, wash out mouth with water provided person is

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

FLASH POINT

Dust Potential: This material, like most materials in powder

N/A AUTOIGNITION TEMP N/A

form, is capable of creating a dust explosion.

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

FIREFIGHTING

FLAMMABILITY N/A

EXTINGUISHING MEDIA

and protective clothing to prevent contact with skin and eyes. EXPOSURE HAZARD(S) Material: Irritant.

Wear respirator, chemical safety goggles, rubber boots, and

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

User Exposure: Avoid contact and inhalation. Avoid prolonged or

Respiratory: Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN

Protective Equipment: Wear self-contained breathing apparatus

heavy rubber gloves. METHODS FOR CLEANING UP

HANDLING

STORAGE

pickup is complete.

repeated exposure.

ENGINEERING CONTROLS

handling.

Property

Molecular Weight

BP/BP Range

Vapor Pressure

MP/MP Range Freezing Point

Bulk Density Odor Threshold

VOC Content

Water Content

Solvent Content

Evaporation Rate

Explosion Limits

Autoignition Temp

Refractive Index

Optical Rotation

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regulations.

transport.

R: 36/37/38

S: 26-36

DSL: No NDSL: No

DISCLAIMER

WARRANTY

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IATA

Section 13 - Disposal Considerations

Section 14 - Transport Information

Indication of Danger: Irritant.

suitable protective clothing.

suitable protective clothing.

UNITED STATES REGULATORY INFORMATION

Indication of Danger: Irritant.

US CLASSIFICATION AND LABEL TEXT

Proper Shipping Name: None

Flammability

Volatile%

Viscosity

Section 7 - Handling and Storage

Suitable: Keep tightly closed. Store in a cool dry place. Section 8 - Exposure Controls / PPE

(EU). Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator.

Eye: Chemical safety goggles.

PERSONAL PROTECTIVE EQUIPMENT

Section 6 - Accidental Release Measures

PROCEDURE(S) OF PERSONAL PRECAUTION(S)

GENERAL HYGIENE MEASURES Wash contaminated clothing before reuse. Wash thoroughly after

Hand: Compatible chemical-resistant gloves.

Safety shower and eye bath. Mechanical exhaust required.

ALDRICH - D186007 Page 2 www.sigma-aldrich.com Section 9 - Physical/Chemical Properties Appearance Color: Very faintly beige

Form: Fine crystals

At Temperature or Pressure

Value

N/A

N/A 139°C

N/A

146.14 AMU

N/A Vapor Density Saturated Vapor Conc. N/A SG/Density N/A

Surface Tension Partition Coefficient N/A Decomposition Temp. N/A Flash Point N/A

Miscellaneous 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. 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.

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Section 15 - Regulatory Information EU ADDITIONAL CLASSIFICATION Symbol of Danger: Xi

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

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immediately with plenty of water and seek medical advice. Wear

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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

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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

SARA LISTED: No CANADA REGULATORY INFORMATION WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS

paper copies for internal use only.

Section 16 - Other Information

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 guarantee of the properties of the product. Sigma-Aldrich Inc.,

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

The above information is believed to be correct but does not

or packing slip for additional terms and conditions of sale.

shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice

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contains all the information required by the CPR.

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