Section 1 - Chemical Product and Company Identification MSDS Name: Adenosine 5'-Monophosphate, 99% Catalog Numbers: Synonyms: Company Identification: Company Identification: (USA) For information in the US, call: For information in Europe, call: Emergency Number, Europe: Emergency Number US:

Material Safety Data Sheet

MSDS# 38351

Adenosine 5'-Monophosphate, 99%

800-ACROS-01

Section 2 - Composition, Information on Ingredients 61 - 19 - 8

Section 3 - Hazards Identification EMERGENCY OVERVIEW Caution! The toxicological properties of this material have not been fully investigated. May cause adverse reproductive effects based upon animal studies. May cause eye, skin, and respiratory tract irritation. Target Organs: No data found.

May cause irritation of the digestive tract. The toxicological properties of this substance have not been fully

May cause respiratory tract irritation. The toxicological properties of this substance have not been fully

Section 4 - First Aid Measures

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get

Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated

Never give anything by mouth to an unconscious person. Get medical aid. Do NOT induce vomiting. If

Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH

Use agent most appropriate to extinguish fire. Use water spray, dry chemical, carbon dioxide, or

(approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be

Section 5 - Fire Fighting Measures

Section 6 - Accidental Release Measures

Section 7 - Handling and Storage Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate

Section 8 - Exposure Controls, Personal Protection

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face

A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or

European Standard EN 149 must be followed whenever workplace conditions warrant respirator use. Section 9 - Physical and Chemical Properties

Color: colorless

Vapor Pressure: Not available Vapor Density: Not available Evaporation Rate: Not available Viscosity: Not available Boiling Point: Not available Freezing/Melting Point: 200 deg C ( 392.00°F)

Molecular Formula: C10H14N5O7P

Section 10 - Stability and Reactivity

Section 11 - Toxicological Information

Carcinogenicity: Adenosine 5'-Monophosphate - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

Section 12 - Ecological Information

Section 13 - Disposal Considerations Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification. RCRA P-Series: None listed. RCRA U-Series: None

Section 14 - Transport Information

Section 15 - Regulatory Information

None of the chemicals are on the Health & Safety Reporting List.

None of the chemicals in this material have a SNUR under TSCA.

None of the chemicals are listed under TSCA Section 12b.

None of the chemicals in this material have an RQ.

None of the chemicals in this product have a TPQ.

No chemicals are reportable under Section 313.

None of the chemicals in this product are listed.

S 28A After contact with skin, wash immediately with plenty of water.

and the MSDS contains all of the information required by those regulations.

CAS# 61-19-8 is not listed on Canada's Ingredient Disclosure List.

company has been advised of the possibility of such damages.

None of the chemicals in this product are under a Chemical Test Rule.

This material does not contain any hazardous air pollutants. This material does not contain any

None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of

Adenosine 5'-Monophosphate is not present on state lists from CA, PA, MN, MA, FL, or

Class 1 Ozone depletors. This material does not contain any Class 2 Ozone depletors. None of the chemicals in this product are listed as Hazardous Substances under the CWA.

the chemicals in this product are listed as Toxic Pollutants under the CWA.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations

Section 16 - Other Information

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantibility or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the

MSDS Creation Date: 9/02/1997

Revision #5 Date 10/03/2005

Adverse reproductive effects have occurred in experimental animals.

Mutagenic effects have occurred in experimental animals. See actual entry in RTECS for complete information.

Molecular Weight: 347.1011

Stable under normal temperatures and pressures.

Decomposition Temperature: Not available

Specific Gravity/Density:

Not available

CAS# 61-19-8: AU7480500

RTECS: Not available.

No information found

No information found

Not available

Shipping Name: Not regulated as a hazardous material

CAS# 61-19-8 is listed on the TSCA

gases, carbon dioxide.

Has not been reported.

Odor: none reported pH: Not available

Solubility in water: SOLUBLE IN WATER (100°C)

Incompatible materials, dust generation, excess heat, strong oxidants.

Carbon monoxide, oxides of nitrogen, oxides of phosphorus, irritating and toxic fumes and

Physical State: Powder

Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

Handling: ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep

|-----| | Adenosine 5'-Monoph|none listed | none listed | none listed

protection regulations in 29 CFR 1910.133 or European Standard EN166.

Wear appropriate protective gloves to prevent skin exposure. Wear appropriate protective clothing to prevent skin exposure.

Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide

Use proper personal protective equipment as indicated in Section 8.

+32 14 57 52 11 +32 14 57 52 99 201-796-7100 800-424-9300 703-527-3887

Acros Organics BVBA

CHEMTREC Phone Number, US: CHEMTREC Phone Number, Europe:

Adverse reproductive effects have been reported in animals.

clothing and shoes. Wash clothing before reuse.

breathing is difficult, give oxygen. Get medical aid.

generated by thermal decomposition or combustion.

conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

Janssen Pharmaceuticalaan 3a

Phosphentaside; Ergadenylic Acid; Tert-Adenylic Acid.

AC102790000, AC102790050, AC102790250

- 2440 Geel, Belgium Acros Organics One Reagent Lane Fair Lawn, NJ 07410

- CAS#:
- Chemical Name: Adenosine 5'-Monophosphate %: 99
- 200-500-0 EINECS#:
  - Hazard Symbols: None listed

May cause eye irritation.

May cause skin irritation.

medical aid.

appropriate foam.

NFPA Rating: health: 1; flammability: 0; instability: 0;

container tightly closed. Avoid ingestion and inhalation.

OSHA Vacated PELs: Adenosine 5'-Monophosphate: None listed

adequate ventilation to keep airborne concentrations low.

Autoignition Temperature: Not applicable.

Flash Point: Not applicable.

ventilation.

Deep freeze (below -20°C).

Explosion Limits: Lower: Not available

Explosion Limits: Not available Upper:

- None listed
- Risk Phrases:

investigated.

investigated.

Potential Health Effects

Eye:

Skin:

Ingestion:

Inhalation:

Chronic:

Eyes:

Skin:

Ingestion:

Inhalation:

Notes to Physician:

General

Media:

General

Information:

Spills/Leaks:

Storage:

Engineering Controls:

Personal Protective Equipment

Exposure Limits

Eyes:

Skin:

Clothing:

Respirators:

Chemical Stability: Conditions to Avoid:

Materials

Products

RTECS#:

LD50/LC50:

Epidemiology:

Teratogenicity:

Reproductive:

Neurotoxicity:

Mutagenicity:

Other:

Not available

Hazard Class: UN Number: Packing Group: Canada TDG

Hazard Class: UN Number: Packing Group:

US Federal TSCA

List

Rule

Inventory.

Chemical Test Rules

CERCLA Hazardous Substances and

corresponding RQs SARA Section 302 Extremely Hazardous

Section 12b

Substances Section 313

Clean Air Act:

Clean Water Act:

California Prop 65

California No Significant

European/International Regulations

Risk Phrases:

Safety Phrases:

possible).

CAS# 61-19-8: 1

Canada

WGK (Water Danger/Protection)

European Labeling in Accordance with EC Directives

S 24/25 Avoid contact with skin and eyes.

CAS# 61-19-8 is listed on Canada's DSL List

Canadian WHMIS Classifications: D2A

Hazard Symbols:Not available

S 37 Wear suitable gloves.

OSHA:

STATE

Risk Level:

Health & Safety Reporting

TSCA Significant New Use

Shipping Name: Not available

listed.

Incompatibilities with Other

Hazardous Decomposition

Hazardous Polymerization

Information:

Extinguishing