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Section 1 – Product and Company Information

HEPPS Product Name

N-(2-Hydroxyethyl)piperazine-N'-(3-Synonym

propanesulfonic acid)

Section 2 - Composition/Information on Ingredient

Substance Name CAS# **HEPPS** 16052-06-5

Section 3 - Hazards Identification

Emergency Overview

OSHA Hazards

None

HMIS Rating

Health: 0 Flammability: 0 Physical: 0

NFPA Rating

Health: 0 Fire: 0 Reactivity: 0

Potential Health Effects

Inhalation May be harmful if inhaled. May cause respiratory tract irritation. May be harmful if absorbed through skin. May cause skin irritation. Skin

May cause eye irritation. Eyes May be harmful if swallowed. Ingestion

Section 4 - First Aid Measures

Oral Exposure

If swallowed, never give anything by mouth to an unconscious person. Rinse mouth with water.

Inhalation Exposure

If inhaled, move into fresh air. If not breathing, give artificial respiration.

Dermal Exposure

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

Eye Exposure

In case of contact, immediately flush eyes with plenty of waters.

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Section 5 - Fire Fighting Measures

Flash Point

No data available.

Autoignition Temperature

No data available.

Flammability

No data available.

Extinguishing Media

Water spray, carbon dioxide, dry chemical powder, or appropriate foam.

Firefighting

Wear self-contained breathing apparatus and protective clothing to prevent contact.

Section 6 - Accidental Release Measures

Personal Precautions

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, gas, or mist.

Environmental precautions

Do not let product enter drains.

Methods for Cleaning Up

Sweep up and shovel. Keep in suitable, closed containers for disposal.

Section 7 - Handling and Storage

Handling

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

Storage

Keep container tightly closed in a dry and well-ventilated place.

Section 8 - Exposure Controls / PPE

Contains no substances with occupational exposure limit values.

Personal Protective Equipment

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

Eve: Safety glasses.

Skin and body: Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene Measures

Wash thoroughly after handling.

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Section 9 - Physical / Chemical Properties

Appearance Solid powder

<u>Property</u> <u>Value</u>

pH Not available
Boiling Point Not available
Melting Point Not available
Flash Point Not available
Ignition Temperature Not available
Explosion Limits Not available

Section 10 - Stability and Reactivity

Stability

Stable under recommended storage conditions

Materials to Avoid

Strong oxidizing agents.

Hazardous Decomposition Products

Hazardous decomposition products formed under fire conditions.

Section 11 – Toxicological Information

Acute Toxicity

No data available.

Irritation and Corrosion

No data available.

Sensitization

No data available.

Chronic Exposure

IARC: No component of this product presents at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product presents at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product presents at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product presents at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive Toxicity

No data available.

Specific Target Organ Toxicity – Single or Repeated Exposure No data available.

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Aspiration Hazard

No data available.

Potential Health Effects

Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.

Ingestion: May be harmful if swallowed.

Skin: May be harmful if absorbed through skin. May cause skin irritation.

Eyes: May cause eye irritation.

Section 12 - Ecological Information

No data available.

Section 13 - Disposal Considerations

Appropriate Method of Disposal of Substance or Preparation

Contact a licensed professional waste disposal service to dispose of this material. Observe all federal, state, and local environmental regulations.

Section 14 - Transport Information

DOT (US)

Not dangerous goods.

IMDG

Not dangerous goods.

IATA

Not dangerous goods.

Section 15 - Regulatory Information

OSHA Hazards

No known OSHA hazards.

DSL Status

All components of this product are on the Canadian DSL list.

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

No SARA hazards.

Avans Biotechnology Corp.

MATERIAL SAFETY DATA SHEET

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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 in applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.