

BioSepra® Process Division

MATERIAL SAFETY DATA SHEET

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SDR HYPERD

BioSepra SA, Division of Ciphergen Biosystems, Inc.

MSDS No. 19-002

1. CHEMICAL PRODUCT AND COMPANY INFORMATION

BioSepra SA, Division of Ciphergen Biosystems, Inc. 48 avenue des Genottes 95800 Cergy-Saint-Christophe, France Tel. +33.(0)1.34.20.78.00

Product Name: SDR HyperD

Catalog Number(s): 20033

Tradename(s): SDR HyperD

Synonyms: none available

Chemical Formula:

A formulation.

Molecular Weight:

A formulation.

COMPOSITION, INFORMATION ON INGREDIENTS

Component CAS No. Percent +ETHANOL 64-17-5 20.00% +NON HAZARDOUS INGREDIENTS NA 0004 80.00%

AIHA ERPG: OSHA IDLH: Component 3300ppm +ETHANOL not estab. not applic. not applic. +NON HAZARDOUS INGREDIENTS

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3. HAZARDS IDENTIFICATION

In the quantity sold or used, this product may be slightly toxic. A constituent(s) of this product causes elevated incidences of human hypersensitivity.

Principal Routes of Entry

Route of Entry Inhalation: Yes. Route of Entry Skin: Yes. Route of Entry Ingestion: Yes.

Effects of Overexposure

Acute Effects:

From Eye Exposure:

No toxicity expected from contact. May cause irritation of the eye. Not expected to be significantly absorbed. May cause allergic reaction.

From Skin Overexposure:

No toxicity expected from contact. Not expected to be significantly absorbed. May cause allergic contact skin effects (dermatoses).

From Inhalation:

In the quantity sold or used, this product may be slightly toxic. May cause allergic respiratory tract effects.

From Ingestion:

No toxicity expected from ingestion. May cause allergic gastrointestinal tract effects.

Other / Systemic Effects None expected.

Summary of Medical Conditions Aggravated by Exposure:

4. FIRST AID MEASURES

First Aid For Eyes:

Wash eyes and skin with water.

First Aid For Skin:

Wash eyes and skin with water. Be alert to early indications of allergic reactions or hypersensitivity.

First Aid For Inhalation:

Remove person to fresh air. Be alert to early indications of allergic

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4. FIRST AID MEASURES (Cont.)

reactions or hypersensitivity.

First Aid For Ingestion:

Be alert to early indications of allergic reactions or hypersensitivity.

Note To Attending Physician:

Be alert to early indications of allergic reactions or hypersensitivity.

5. FIRE FIGHTING MEASURES

Combustible: Yes.

Flashpoint: (F) (C) >140F closed cup

Method Used:

LEL:

Not applicable.

UET.:

Autoignition Temp.: *

Not applicable.

Extinguishing Agents:

Use means appropriate for surrounding materials.

Personal Protective Equipment for Fire Conditions:

No specific requirements.

6. ACCIDENTAL RELEASE MEASURES

(Note that accidental releases may be subject to special reporting requirements and other regulatory mandates. Check and comply with applicable laws and regulations.)

Personal Protective Equipment for Spill Conditions: The following clothing and/or equipment material(s) should generally be protective: Any waterproof material. No respiratory protection will be needed for most operations.

(See section 8 for recommendations on protective materials of construction.)

Spill Cleanup:

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6. ACCIDENTAL RELEASE MEASURES (Cont.)

Absorb spill. Common absorbent materials effective. Deposit in appropriate containers for removal and disposal.

Special Instructions:

7. HANDLING AND STORAGE

(Storage of some materials is regulated; it is the purchaser's responsibility to ensure that storage complies with all applicable laws and regulations.)

Storage Temperature: Ambient (15-35 C).

Ambient (15-35 C).

Storage Pressure: Atmospheric.

Storage and Handling Procedures:

Keep away from heat. During storage, avoid contact with the following:

Strong oxidizers. Acids/bases. Keep container tightly sealed.

Special Storage Considerations:

See expiration date for stability under proper storage conditions.

8. EXPOSURE CONTROLS, PERSONAL PROTECTION

General Protection and Precautions

Protective Measures:

Minimize absorption, inhalation, and ingestion by whatever means are practical and appropriate. Area ventilation is generally adequate. No special measures needed for normal operations.

Air Purifying Respirator Canisters/Cartridges:

Dusts, fumes, and mists (red or gray stripe ANSI color code, NIOSH approved). HEPA-type dusts/radionuclides (magenta ANSI color code, NIOSH approved.

Glove and Protective Clothing:

Any waterproof material.

Eye Protection:

Safety glasses should always be the minimum eye protection when handling chemicals.

Hygiene Practices:

Hand washing is recommended after working with this product.

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8. EXPOSURE CONTROLS, PERSONAL PROTECTION (Cont.)

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Colorless liquid. White or translucent.

Odor: No odor.

Boiling Point (F) (C):

Melting Point (F) (C): none available

pH: 6-8

Evaporation Rate: >1

Vapor Density (Air = 1): 1

Solubility in water (g/100g):

An aqueous solution, and/or suspension.

Partition Coefficient (Kow): <1

Vapor Pressure (mm Hg): 10mm @ 25C

Volatiles (lbs/gallon): none available

Viscosity (Cp): 1 @ 25C

Heating Coefficient (cal/g): none available

Conductivity (mhos/cm³):

Expected to be high based on other data.

Specific Gravity: 1.0 @ 25C

10. STABILITY AND REACTIVITY

Stability:

See expiration date for stability under proper storage conditions.

Conditions To Avoid:

Keep away from heat.

Materials To Avoid:

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10. STABILITY AND REACTIVITY (Cont.)

Strong oxidizers. Acids/bases. Deoxyribonuclease.

Hazardous Products Of Spontaneous Decomposition: Will not occur.

Hazardous Products Of Thermal Decomposition:

Carbon monoxide. Carbon dioxide. The quantity generated may pose a minor hazard.

Hazardous Polymerization:

Will not occur.

11. TOXICOLOGICAL INFORMATION

Consensus Exposure Guidelines:

ACGIH:

Component

+ETHANOL

+NON HAZARDOUS INGREDIENTS

TLV-TWA: TLV-Ceiling: Skin: TLV-STEL: BEI:

not estab. 1000ppm not estab. not estab. not estab. not applic. no not applic not applic not applic.

Regulatory Exposure Guidelines:

OSHA

Component

+ETHANOL

+NON HAZARDOUS INGREDIENTS

Skin Warning?:

PEL: OSHA STEL: Excursion: Ski 1000ppm not estab. not estab. no not applic not applic. no

Acute Exposures

Little or no health hazard exists.

Dermal:

Little or no health hazard exists.

Inhalation:

Occupational exposure may cause a minor health hazard.

Oral:

Little or no health hazard exists.

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11. TOXICOLOGICAL INFORMATION (Cont.)

Sensitization:

A constituent(s) of this product causes elevated incidences of human hypersensitivity.

Chronic Effects

Systemic effects:

Little or no health hazard exists.

Target Organs:

Liver. Nervous system.

Mutagenicity:

None expected.

Reproductive Hazards:

None expected.

Carcinogenicity Status

Carcinogenicity:

None expected.

NTP:

Not listed.

IARC:

Not listed.

OSHA:

Not listed.

Toxicological Investigations

Mice:

Rats:

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11. TOXICOLOGICAL INFORMATION (Cont.)

Human:

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No specific information found.

12. ECOLOGICAL INFORMATION

Ecotoxicological Information:

In the quantity sold or used, this product should pose little or no hazard. No toxic effects expected upon environmental release.

Environmental Movement and Partitioning:

Short-term movement could be rapid due to high water solubility. Movement expected to be limited by relatively rapid environmental detoxification. Expected to partition strongly into aqueous environmental components.

Environmental Fate (Degradation, Transformation, and Persistence): Expected to rapidly decompose in the environment. Expected to readily detoxify at elevated temperatures. Microbial decomposition expected.

Environmental Investigations:

No information found.

13. DISPOSAL CONSIDERATIONS

EPA Waste Number (RCRA Hazard Class):
Not specifically listed in the D, F, K, P, or U waste tables of the US EPA
Resource Conservation and Recovery Act (RCRA), 40 CFR Part 261.

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13. DISPOSAL CONSIDERATIONS (Cont.)

Other Waste Classifications:

Treatment and Disposal:

This product is not recyclable or reusable. May be incinerated in a hazardous waste incinerator. Product should be removed to a hazardous waste landfill only if no other disposal method is available.

(Note that treatment and disposal activities may be subject to laws and regulations that may include before-the-fact permitting as well as reporting requirements. It is the purchaser's responsibility to comply.)

14. TRANSPORT INFORMATION

North American Emergency Response Guidebook #: None assigned.

Transportation Agency: DOT.

Shipping Designation:

Not listed in Title 49 of the U.S. Code of Federal Regulations Section 171.8 as a hazardous material. Falls outside the toxicity specifications of Hazard Class 6, 49 CFR Part 173.132 (a)(1).

Hazard Class:

None assigned.

UN #:

None assigned.

Packing Group:

None assigned.

Required Label Description:

None assigned.

15. REGULATORY INFORMATION

OSHA: Not a "hazardous chemical" under US OSHA HazCom regulation (29 CFR Part 1910.1200).

TSCA: Sold under the TSCA research and development small quantities exemption

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15. REGULATORY INFORMATION (Cont.)

only. May be used only for research and development purposes in small quantities by, or under the direct supervision of, technically qualified persons in compliance with 40 CFR Section 720.36.

Most organic constituent(s) of this product... Included on the US EPA Toxic Substances Control Act (TSCA; 40 CFR Part 710) inventory.

SARA: Not listed.

CERCLA Reportable Quantity:

Section 302:

Not listed.

Section 304:

Not listed.

Section 313:

Not listed.

US California Proposition 65:

Canadian Regulations:

WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (CPR SECTION (33)) This product has been classified according to the hazard criteria of the Controlled Products Regulations, and the MSDS. This document contains all required information.

European Union:

MAC (Germany):

None assigned.

EINICS #:

None assigned.

Risk Phrase: R36/37/38: Irritating to eyes, respiratory system and skin.

Safety Phrase: S16: Keep away from sources of ignition - NO smoking. S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S36: Wear suitable protective clothing.

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16. OTHER INFORMATION

NFPA 704M Rating

Fire: 1 Health: 1 Reactive: 0 Special: none

Additional NFPA information:

Not listed.

Ratings not reviewed by NFPA.

The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since Ciphergen cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. THE INFORMATION IN THIS MSDS DOES NOT CONSTITUTE A WARRANTY, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE.