

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Product code RAWMX-01001
Product name Wistar Rat Mesenchymal Stem Cells

Company/Undertaking Identification

Cyagen Biosciences Inc.
574 East Weddell Dr, Suite 6
Sunnyvale, CA 94089, U.S.A.
Tel: 800-921-8931

For research use only

2. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous/Non-hazardous Components

| Chemical Name | CAS-No | Weight % |
|-------------------|---------|----------|
| dimethylsulfoxide | 67-68-5 | 10 |

The product contains no substances which at their given concentration, are considered to be hazardous to health.

3. HAZARDS IDENTIFICATION**Emergency Overview**

Components of the product may be absorbed into the body through the skin

Form
Liquid

3. HAZARDS IDENTIFICATION

Principle Routes of Exposure/

Potential Health effects

| | |
|------------|---|
| Eyes | Mild eye irritation. |
| Skin | moderate skin irritation. Components of the product may be absorbed into the body through the skin. |
| Inhalation | No information available |
| Ingestion | May be harmful if swallowed. |

Specific effects

| | |
|-----------------------|--------------------------|
| Carcinogenic effects | No information available |
| Mutagenic effects | No information available |
| Reproductive toxicity | No information available |
| Sensitization | No information available |

Target Organ Effects

No information available

HMS

| | |
|--------------|---|
| Health | 1 |
| Flammability | 0 |
| Reactivity | 0 |

4. FIRST AID MEASURES

| | |
|--------------------|--|
| Skin contact | Wash off immediately with plenty of water |
| Eye contact | Rinse thoroughly with plenty of water, also under the eyelids. |
| Ingestion | Never give anything by mouth to an unconscious person |
| Inhalation | Move to fresh air |
| Notes to physician | Treat symptomatically. |

5. FIRE-FIGHTING MEASURES

| | |
|---|---|
| Suitable extinguishing media | Dry chemical |
| Special protective equipment for firefighters | Wear self-contained breathing apparatus and protective suit |

6. ACCIDENTAL RELEASE MEASURES

| | |
|-------------------------|--|
| Personal precautions | Use personal protective equipment |
| Methods for cleaning up | Soak up with inert absorbent material. |

7. HANDLING AND STORAGE

| | |
|----------|--------------------------------------|
| Handling | No special handling advice required |
| Storage | Keep in properly labelled containers |

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure controls

Exposure limits

| Chemical Name | OSHA PEL (TWA) | OSHA PEL (Ceiling) | ACGIH OEL (TWA) | ACGIH OEL (STEL) |
|-------------------|----------------|--------------------|-----------------|------------------|
| dimethylsulfoxide | - | - | - | - |

Engineering measures

Ensure adequate ventilation, especially in confined areas

Personal protective equipment**Respiratory protection**

In case of insufficient ventilation wear suitable respiratory equipment

Hand protection

Impervious butyl rubber gloves. Nitrile gloves are not recommended. Some brands of Nitrile gloves have breakthrough times of five minutes. Nitrile gloves are not recommended. Some brands of Nitrile gloves have breakthrough times of five minutes.

Eye protection

Safety glasses with side-shields

Skin and body protection

Light weight protective clothing.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice

Environmental exposure

Prevent product from entering drains.

controls**9. PHYSICAL AND CHEMICAL PROPERTIES****General Information****Form**

Liquid

Important Health Safety and Environmental Information**Boiling point/range**

°C No data available

°F No data available

Melting point/range

°C No data available

°F No data available

Flash point

°C No data available

°F No data available

Autoignition temperature

°C No data available

°F No data available

Oxidizing properties

No information available

Water solubility

soluble

10. STABILITY AND REACTIVITY**Stability**

Stable.

Materials to avoid

No information available

Hazardous decomposition products

No information available

Polymerization

Hazardous polymerisation does not occur.

11. TOXICOLOGICAL INFORMATION**Acute toxicity**

| Chemical Name | LD50 (oral, rat/mouse) | LD50 (dermal, rat/rabbit) | LD50 (inhalation, rat/mouse) |
|-------------------|------------------------|---------------------------|------------------------------|
| dimethylsulfoxide | 14500 mg/kg (Rat) | No data available | No data available |

Principle Routes of Exposure/**Potential Health effects****Eye**

Mild eye irritation.

Skin

moderate skin irritation. Components of the product may be absorbed into the body through the skin.

Inhalation

No information available

Ingestion

May be harmful if swallowed.

Specific effects**Carcinogenic effects**

No information available

Mutagenic effects

No information available

Reproductive toxicity

No information available

Sensitization

No information available

Target Orcia Effects

No information available

12. ECOLOGICAL INFORMATION**Ecotoxicity effects**

No information available.

Mobility

No information available.

Biodegradation

Inherently biodegradable.

Bioaccumulation

Does not bioaccumulate.

13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with local regulations

14. TRANSPORT INFORMATION**IATA****Proper shipping name**

Not classified as dangerous in the meaning of transport regulations

Hazard Class

No information available

Subsidiary Class

No information available

Packing group

No information available

UN-No

No information available

15. REGULATORY INFORMATION**International Inventories**

| Chemical Name | TSCA | PICCS | ENCS | DSL | NDSL | AICS |
|-------------------|--------|--------|--------|--------|------|--------|
| dimethylsulfoxide | Listed | Listed | Listed | Listed | - | Listed |

U.S. Federal Recriptions**SARA 313**

This product is not regulated by SARA.

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CIFIR 61)

This product does not contains HAPs.

U.S. State Reaulations

| Chemical Name | Massachusefts-RTK | New Jersey - RTK | Pennsylvania - RTK | Illinois - RTK | Rhode Island - RTK |
|-------------------|-------------------|------------------|--------------------|----------------|--------------------|
| dimethylsulfoxide | - | - | - | - | - |

California Proposition 65

This product does not contain chemicals listed under Proposition 65

WHMIS hazard class:

D2B Toxic materials



This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR

16. OTHER INFORMATION

This material is sold for research and development purposes only. It is not for any human or animal therapeutic or clinical diagnostic use. It is not intended for food, drug, household, agricultural, or cosmetic use. An individual technically qualified to handle potentially hazardous chemicals must supervise the use of this material.

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End of Safety Data Sheet