

Material Safety Data Sheet

Revision Date: 03-Feb-2012

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

Product code HUXUC-01101

Product name Human Umbilical Cord Mesenchymal Stem Cells with GFP

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/IN FORMATION 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

HMIS

Health	1
Flammability	0
Reactivity	0

4. FIRST AID MEASURES

Skin contact Wash off immediately with plenty of water

Rinse thoroughly with plenty of water, also under the eyelids. Eve contact 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

Special protective equipment

for firefighters

Dry chemical

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 Hand protection

In case of insufficient ventilation wear suitable respiratory equipment Impervious butyl rubber gloves. Nitrile gloves are not recommended. Some

brands of Nitrile gloves have breakthrough times of five minutes.

Eve protection

Safety glasses with side-shields

Skin and body protection Hygiene measures

Light weight protective clothing. 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 Melting point/range °C No data available °C No data available °F No data available °F No data available

Flash point

°C No data available °C No data available

°F No data available °F No data available

Autoignition temperature Oxidizing properties

No information available

Water solubility

soluble

10. STABILITY AND REACTIVITY

Stability

Stable

Materials to avoid Hazardous decomposition No information available No information available

products

Polymerization

Hazardous polymerisation does not occur.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Chemical Name	LD50 (oral,rat/mouse)	LD50 (dermal, rattrab bit)	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 Mutagenic effects Reproductive toxicity Sensitization No information available No information available No information available No information available

Target Orcia Effects

No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity effectsNo information available.MobilityNo information available.BiodegradationInherently biodegradable.BioaccumulationDoes not bioaccumulate

13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with local regulations

14. TRANSPORT INFORMATION

<u>IATA</u>

Proper shipping name Hazard Class

Not classified as dangerous in the meaning of transport regulations
No information available
No information available

Subsidiary Class Packing group UN-No

No information available 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 Reciulations

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

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