

Material Safety Data Sheet

Revision Date: 03-Feb-2012

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

Product code Product name MUDEF-01002 KO-Certified 3 Drug-Resistant Mouse Embryonic Fibroblasts, Irradiated

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 Skin	Mild eye irritation.
SKIII	moderate skin irritation. Components of the product may be absorbed into the body
Inhalation	through the skin. 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	
Eye contact	
Ingestion	
Inhalation	
Notes to physician	

Wash off immediately with plenty of water Rinse thoroughly with plenty of water, also under the eyelids. Never give anything by mouth to an unconscious person Move to fresh air 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 Methods for cleaning up Use personal protective equipment Soak up with inert absorbent material

7. HANDLING AND STORAGE

Handling Storage No special handling advice required 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. Safety glasses with side-shields Eye protection 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 Melting point/range Flash point Autoignition temperature Oxidizing properties Water solubility
- °C No data available °C No data available °C No data available °C No data available No information available soluble
- °F No data available °F No data available °F No data available °F No data available

10. STABILITY AND REACTIVITY

Stability Materials to avoid Hazardous decomposition products Polymerization

Stable No information available No information available

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 Skin	Mild eye irritation. 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.

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 effects Mobility Biodegradation Bioaccumulation No information available. No information available. Inherently biodegradable. Does not bioaccumulate

13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with local regulations

14. TRANSPORT INFORMATION

<u>IATA</u>

Proper shipping name Hazard Class Subsidiary Class Packing group UN-No Not classified as dangerous in the meaning of transport regulations No information available No information available 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 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