

Material Safety Data Sheet

EvaGreen qPCR System-ROX II

1. Identification of the substance/mixture and of the company/undertaking

Preparation Name:

EvaGreen qPCR System-ROX II

Product code:

QP006-0100

Use of the preparation:

For laboratory use.

Suitable for use as molecular weight standards for SDS-PAGE electrophoresis.

Company identification:

BIO-HELIX Co.,LTD.

Site: <http://www.bio-helix.com>

E-mail: info@bio-helix.com

For research use only. Not intended for human or animal diagnostic or therapeutic uses.

2. Hazards identification

GHS – Classification

Signal Word	Health Hazard	Physical Hazards
not hazardous	not hazardous	not hazardous

Precautionary statements

P262 - Do not get in eyes, on skin, or on clothing

P264 - Wash hands thoroughly after handling

Principle Routes of Exposure/

Potential Health effects

Eyes

May cause eye irritation with susceptible persons.

Skin

May cause skin irritation in susceptible persons. s. Components of the product may be absorbed into the body through the skin.

Inhalation

May be harmful by inhalation.

Ingestion

May be harmful if swallowed.

Specific effects

Carcinogenic effects

none

Mutagenic effects

Substances which cause concern for man owing to possible mutagenic effects but for which the available information is not adequate for making a satisfactory assessment.

Reproductive toxicity

none

Sensitization

none

Target Organ effects

No known effects under normal use conditions.

HMIS

Health	Flammability	Reactivity
0	0	0

3. Composition/information on ingredients

Chemical Name	CAS-No	EINECS-No	Weight %
dimethylsulfoxide	67-68-5	200-664-3	0.1-1
glycerol	56-81-5	200-289-5	3-7
EvaGreen	--	--	<0.1
ROX II Reference Dye	--	--	<0.01

Material Safety Data Sheet

The product contains no substances which at their given concentration, are considered to be hazardous to health. We recommend handling all chemicals with caution.

4. First aid measures

Skin contact	Wash off immediately with plenty of water. If symptoms persist, call a physician
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Consult a physician.
Ingestion	Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Do not induce vomiting without medical advice.
Inhalation	Move to fresh air. If symptoms persist, call a physician. If not breathing, give artificial respiration.
Notes to physician	Treat symptomatically.

5. Fire-fighting measures

Suitable extinguishing media	Water spray. Carbon dioxide (CO ₂). Foam. 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.
Environmental precautions	Prevent further leakage or spillage if safe to do so. See Section 12 for additional information.

7. Handling and storage

Handling	Always wear recommended Personal Protective Equipment. No special handling advice required.
Storage	Keep in a dry, cool and well-ventilated place

8. Exposure controls/personal protection

Exposure limits

Chemical Name	OSHA PEL	OSHA PEL(Ceiling)	ACGIH OEL(TWA)	ACGIH OEL(STEL)
dimethylsulfoxide	none	none	none	none
glycerol	15 mg/m ³ 5 mg/m ³	none	10 mg/m ³	none
ROX II Reference Dye	none	none	none	none
EvaGreen	none	none	none	none

Engineering measures	Ensure adequate ventilation, especially in confined areas Personal protective equipment
Personal Protective	Equipment requirements are dependent on the user institution's risk assessment and are specific to the risk assessment for each laboratory where this material may be used.
Respiratory	protection In case of insufficient ventilation wear suitable respiratory equipment
Hand protection	Impervious gloves.
Eye protection	Safety glasses with side-shields

Material Safety Data Sheet

Skin and body protection Hygiene measures

Lightweight protective clothing.
Handle in accordance with good industrial hygiene and safety practice

Environmental exposure Controls

Prevent product from entering drains.

9. Physical and chemical properties

General Information

Form	liquid	
Appearance	No information available	
Odor	No information available	
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 under normal conditions.

Materials to avoid

No dangerous reaction known under conditions of normal use

Hazardous decomposition products polymerization

No information available

Hazardous polymerisation does not occur.

11. Toxicological information

Acute toxicity

Chemical Name	LD50 (oral,rat/mouse)	LD50 (dermal,rat/rabbit)	LC50 (inhalation,rat/mouse)
dimethylsulfoxide	14500 mg/kg (Rat)	no data available	no data available
glycerol	12600 mg/kg Oral	no data available	no data available
ROX II Reference Dye Mastermix	no data available	no data available	no data available

Principle Routes of Exposure/ Potential Health effects

Eyes

May cause eye irritation with susceptible persons

Skin

May cause skin irritation in susceptible persons
Components of the product may be absorbed into the body through the skin.

Inhalation

May be harmful by inhalation

Ingestion

May be harmful if swallowed.

Carcinogenic effects

none

Mutagenic effects

Substances which cause concern for man owing to possible mutagenic effects but for which the available information is not adequate for making a satisfactory assessment.

Material Safety Data Sheet

Reproductive toxicity none
Sensitization none
Target Organ Effects No known effects under normal use conditions.

12. Ecological information

Ecotoxicity effects Daphnia magna (Water flea)

Mobility see log Pow

Biodegradation Inherently biodegradable

Bioaccumulation Does not bioaccumulate.

Chemical Name	Freshwater Algae Data	Water Flea Data	Freshwater Fish Species Data	Microtox Data	log Pow
---------------	-----------------------	-----------------	------------------------------	---------------	---------

dimethylsulfoxide 67-68-5	Skeletonema costatum EC5012350 -25500 mg/L (96 h)	Daphnia species EC50=7000 mg/L (24h)			logPow-2.03
---------------------------	---	---	--	--	-------------

glycerol		Daphnia 56-81-5 magna EC50>500 mg/L (24h)			logPow-1.76
----------	--	--	--	--	-------------

13. Ecotoxicity effects

Dispose of in accordance with local regulations

14. Transport information

IATA

Proper shipping name Not classified as dangerous in the meaning of transport

Hazard class none

Subsidiary Class none

Packing group none

UN-No none

15. Regulatory information

Component TSCA

dimethylsulfoxide 67-68-5 (0.1-1) Listed

glycerol 56-81-5 (3-7) Listed

EvaGreen (<0.1) --

U.S. Federal Regulations

SARA 313 This product is not regulated by SARA

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

This product does not contains HAPs.

U.S. State Regulations

Chemical Name	Massachusetts - RTK	New Jersey -RTK	Pennsylvania -RTK	Illinois - RTK	Rhode Island -RTK
dimethylsulfoxide	--	--	--	--	--
glycerol	Listed		Listed		Listed
EvaGreen	--	--	--	--	--
ROX II Reference Dye	--	--	--	--	--

Material Safety Data Sheet

California Proposition 65

This product does not contain chemicals listed under Proposition 65

WHMIS Hazard Class

Non-controlled

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 herapeutic or clinical diagnostic use. It is not intended for food, drug, household, agricultural, or osmetic use. An individual technically qualified to handle potentially hazardous chemicals must supervise the use of this material.

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 be present unknown hazards and should be used with caution. Since GenedireX Corporation 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.