

# Material Safety Data Sheet

## EvaGreen qPCR System-ROX I

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

Preparation Name:

EvaGreen qPCR System-ROX I

Product code:

QP005-0100

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](mailto: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 I Reference Dye	--	--	<0.01

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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

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

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Water spray. Carbon dioxide (CO <sub>2</sub> ). Foam. Dry chemical.
<b>Special protective equipment for firefighters</b>	Wear self-contained breathing apparatus and protective suit.

## 6. Accidental release measures

<b>Personal precautions</b>	Use personal protective equipment.
<b>Methods for cleaning up</b>	Soak up with inert absorbent material.
<b>Environmental precautions</b>	Prevent further leakage or spillage if safe to do so. See Section 12 for additional information

## 7. Handling and storage

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

## 8. Exposure controls/personal protection

### Exposure limits

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

<b>Engineering measures</b>	Ensure adequate ventilation, specially in confined areas Personal protective equipment
<b>Personal Protective</b>	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.
<b>Respiratory</b>	protection In case of insufficient ventilation wear suitable respiratory equipment
<b>Hand protection</b>	Impervious gloves.
<b>Eye protection</b>	Safety glasses with side-shields

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## Skin and body protection

Lightweight 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

#### 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

No information available

### polymerization

Hazardous polymerisation does not occur.

## 11. Toxicological information

### Acute toxicity

#### Chemical Name

#### LD50

#### LD50

#### LC50

(oral,rat/mouse)

(dermal,rat/rabbit)

(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 I Reference Dye

no data available

no data available

no data available

Mastermix

### 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.

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**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
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dimethylsulfoxide 67-68-5	Skeletonema costatum EC5012350 -25500 mg/L (96 h)	Daphnia species EC50=7000 mg/L (24h)			logPow-2.03
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glycerol		Daphnia 56-81-5 magna EC50>500 mg/L (24h)			logPow-1.76
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## 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 Regulation

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 contain HAPs.

U.S. State Regulation

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

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## 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 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.

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.

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