

SAFETY DATA SHEET

 First edition
 Revision date
 Replaces
 Performed by
 Page

 28/11/2011, R01
 04/09/2020, R05
 25/03/2019, R04
 Trossa AB/JW
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Olerup SSP® GelRed™ Dropper Bottle

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 PRODUCT IDENTIFIER Olerup SSP® GelRed™ Dropper Bottle

1.2 RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST GelRed is an intercalating nucleic acid stain used in molecular biology for

 $agarose\ gel\ electrophores is.$

1.3 DETAILS OF THE SUPPLIER OF THE CareDx AB

SAFETY DATA SHEET

Franzéngatan 5, 112 51 Stockholm, Sweden

Tel: +46 8 50893900

If you have questions about the safety data sheet, please contact:

techsupport-labproducts@caredx.com

1.4 EMERGENCY TELEPHONE

NUMBER

In emergency situations, EU: dial 112, USA and Canada: dial 911, Australia

dial 000 or 112 and ask for Poison information.

SECTION 2. HAZARDS IDENTIFICATION

2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE (CLP)

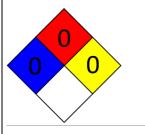
Not classified according to the Regulation (EC) No 1272/2008 of the European parliament and of the council.

2.2 LABEL ELEMENTS

Labeling not required according to the Regulation (EC) No 1272/2008 of the European parliament and of the council.

Other labelling

NFPA-rating may be used.



Other information

GelRed is a sensitive, stable, and environmentally safe fluorescent nucleic acid dye designed to replace the toxic ethidium bromide (EtBr) for staining dsDNA, ssDNA or RNA in agarose gels or polyacrylamide gels. GelRed and EtBr are structurally closely related and have virtually the same spectra. A safety data sheet is not required for this product, but due to the structural resemblance to ethidium bromide and to that ethidium bromide being classified as toxic if inhaled as well as suspected to cause genetic defects, suspiciousness of its toxicity would be reasonable. This substance is however modified to not be able to penetrate cell-membranes, and thus could not possess these toxic properties.¹

No information about the products PBT or vPvB properties.

Do not contain any SVHC-substances (= Substance of Very High Concern) >= 0,1% from the Candidate list of EU.



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2.3 OTHER HAZARDS

No other hazards are related to the product.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 MIXTURES

Description of the mixture

Water solution of GelRed™

Substances EC No CAS No REACH No ³ Conc CLP-classification ²

weight %

GelRed™ a - - - < 0,1 - -

Water 231-791-2 7732-18-5 - > 99 - -

a) Classification according to the manufacturer.4

Other information

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SECTION 4. FIRST AID MEASURES

4.1 DESCRIPTION OF FIRST AID MEASURES

Inhalation

Fresh air.

Skin contact

Take off contaminated clothes. Rinse with water. Consult a doctor if skin irritation or rash emerges.

Eye contact

Rinse with soft jet of water or eye wash for a few minutes. Use temperate water. Hold eyelids open, remove contact lenses. Consult a doctor if symptoms remain.

Ingestion

Rinse the mouth and drink water.

Information to medical advice

No specific information.

4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

Inhalation: Not expected to give any acute or delayed symptoms.

Skin contact: Not expected to give any acute or delayed symptoms.



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Eye contact: Probably causes discomfort but is not expected to give any serious symptoms.

Ingestion: Smaller amounts are not expected to provide any acute or delayed symptoms.

4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

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SECTION 5. FIREFIGHTING MEASURES

5.1 EXTINGUISHING MEDIA RELEVANT

Use the same extinguishing media as recommended for the surroundings. Do not use a water jet.

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE MIXTURE

Non-flammable. In case of fire, toxic and corrosive fumes such as carbon- and nitrogen oxides, hydrogen iodide and hydrogen gas can form.

5.3 ADVICE FOR FIREFIGHTERS

Precautions according to standard procedures in the presence chemical fires. Use breathing apparatus to protect against toxic and corrosive gases and suitable protective clothing.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Avoid inhalation and direct contact with the product. Wear protective gloves and clothing and eye protection when cleaning the product. Keep unprotected persons away.

6.2 ENVIRONMENTAL PRECAUTIONS

Avoid discharge of large amounts into the sewer.

6.3 METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP

Absorb with a liquid binding material such as sand soil or similar. Collect and treat as conventional waste. Rinse away residues with plenty of water.

6.4 REFERENCE TO OTHER SECTIONS

See Section 8 for Exposure controls / personal protection and Section 13 for disposal considerations.

SECTION 7. HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING

Avoid inhalation and direct contact with the product. Do not eat, drink and smoke when handling the product. Normal hand hygiene.



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7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES 5

Store in well closed container, protected from light at room-temperature.

At low temperatures, such as $+4^{\circ}$ C, dye precipitation may occur. Should this occur, heat the solution in a water bath at $+45^{\circ}$ C to $+50^{\circ}$ C for two minutes and/or vortex the solution.

7.3 SPECIFIC END USE

See section 1.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 OCCUPATIONAL EXPOSURE LIMIT VALUES

Contains no substances with occupational exposure limits in the working environment according to GESTIS International Limit Values http://limitvalue.ifa.dguv.de/.

8.2 EXPOSURE CONTROLS

Appropriate technical measures

Methods are developed to prevent direct contact. Ensure good ventilation. In case of insufficient ventilation, mechanical ventilation with local exhaust ventilation used.

Possibility to rinse eyes may be available at place of work. Also, safety shower may be available if handling large amounts.

Personal protection

Eye/face protection: Not normally required.

Skin protection: Not normally required.

Respiratory protection: Not normally required.

Other protection: Long coat.

Thermal hazard. Irrelevant.

8.3 ENVIRONMENTAL EXPOSURE CONTROLS

Avoid excessive release to the environment.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

Product description ⁵

Appearance: Dark red, clear liquid Odour: Not determined

Solubility in water: High



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Information about following is missing or is irrelevant: Odour threshold, pH, melting-point, boiling-point, flash-point, evaporation rate, flammability, flammability or explosive limits, vapour pressure, vapour density, relative density, solubility in organic solvents, partition coefficient (Log Pow), auto-ignition temperature, decomposition temperature, viscosity, explosive and oxidizing properties.

9.2 OTHER INFORMATION

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SECTION 10. STABILITY AND REACTIVITY

10.1 REACTIVITY

The product is not reactive in normal handling and storage as recommended in section 7.

10.2 CHEMICAL STABILITY

The product is stable under normal handling and storage as recommended in section 7.

10.3 POSSIBILITY OF HAZARDOUS REACTIONS

None known.

10.4 CONDITIONS TO AVOID

High temperatures.

10.5 INCOMPATIBLE MATERIALS

Strong oxidizers and strong bases.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS

No data.

SECTION 11. TOXICOLOGICAL INFORMATION

No toxicological data is available for the product nor its components. The product is not classified as hazardous to the health and is not expected to give any negative effects on health but should be handled according to good industrial practice.

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS

Acute toxicity: Not classified as acutely toxic.

GelRed™ No data.

Corrosive/Irritating on the skin: Not classified as a skin irritant.

Serious eye damage / irritation: Not classified as irritating to the eyes.

Respiratory / skin sensitization: Not classified as a sensitizer.

Germ cell mutagenicity: Not classified as mutagenic.

Carcinogenicity: Not classified as a carcinogen.



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Toxic to reproduction: Not classified as toxic to reproduction.

Specific organ toxicity-single exposure: No data. Specific organ toxicity-repeated

exposure:

No data.

Aspiration Hazard:

Not relevant.

Specific effects

None known.

11.2 OTHER INFORMATION

SECTION 12. **ECOLOGICAL INFORMATION**

No toxicological data is available for the product nor its components. The product is not classified as a hazardous to the environment and is not expected to result in any negative environmental consequences but should be handled according to good industrial standards.

12.1 TOXICITY

No data.

12.2 PERSISTENCE AND DEGRADABILITY

No data.

12.3 BIOACCUMULATIVE POTENTIAL

No data.

12.4 MOBILITY IN SOIL

The product is water soluble.

12.5 RESULTS OF PBT AND vPvB ASSESSMENT

No information about the product PBT or vPvB properties.

12.6 OTHER ADVERSE EFFECTS

None known.



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SECTION 13. DISPOSAL CONSIDERATIONS

13.1 WASTE TREATMENT METHODS

Product

Classified as conventional waste according to the Commission Regulation (EU) No 1357/2014 on waste. EWC-code: 18 01 07 (chemicals other than those mentioned in 18 01 06) according to the European Waste Catalogue). All disposal practices must be in accordance with local, regional, national, and international regulations.

Packaging

Empty containers are treated as conventional waste and sent for recycling or incineration.

SECTION 14. TRANSPORT INFORMATION

This product is not covered by the regulations for transportation of dangerous goods.

SECTION 15. REGULATORY INFORMATION

15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE

This safety data sheet is prepared in accordance with the EUROPEAN PARLIAMENT AND COUNCIL REGULATION (EC) No 1907/2006 of 18 December 2006 concerning the registration, evaluation, authorization and restriction of chemicals (REACH) and Commission Regulation (EU) No 2015/830 of 28 May 2015 amending the European Parliament and Council Regulation (EC) No 1907/2006 on the registration, evaluation, authorization and restriction of chemicals (REACH).

Regulations

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (CLP).

GESTIS International Limit Values http://limitvalue.ifa.dguv.de/.

Commission Regulation (EU) No 1357/2014 of 18 December 2014 replacing Annex III to Directive 2008/98/EC of the European Parliament and of the Council on waste.

European Waste Catalogue (EWC-codes): http://www.sepa.org.uk/media/163421/ewc_guidance.pdf.

15.2 CHEMICAL SAFETY ASSESSMENT

No Chemical Safety Assessment has been carried out for this mixture by the supplier.

SECTION 16. OTHER INFORMATION

Classification procedure

Test-data is prioritized at classification of the product. In absence of such, the classification-rules in the regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures (CLP) been used.



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Hazard statements in section 3

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Abbreviations

IARC International Agency for Research on Cancer
PBT Persistent Bio-accumulative and Toxic substance

SVHC Substance of Very High Concern

vPvB very Persistent and very Bio-accumulative substance

Advice about education

To use this product, you should have an education that is relevant to the properties of the product and relevant use.

References

- 1) https://biotium.com/product/page-gelred-nucleic-acid-gel-stain/
- 2) Classification & Labelling Inventory Database, ECHA.
- 3) Registered substances, ECHA.
- 4) Information from the producer: MSDS, version 04/04/2016.
- 5) Information from older safety document: MSDS, version 28/11/2011.

Version description

This safety data sheet has been revised in accordance with title IV and annex II in the regulation (EC) No 1907/2006 of the European parliament and of the council (REACH).

Information has been modified under the following sections in the safety data sheet: 1

The safety data sheet is dated 04/09/2020 and it replaces version dated 25/03/2019.