Olerup SSP[®] GelRed[™] Dropper Bottle

Product number: 103.302-05

Lot number: 39K Volume: 5 ml

Expiry date: 2012-June-01 Storage: Room temperature

PRODUCT USE

GelRedTM is a sensitive, stable and environmentally safe fluorescent nucleic acid dye designed to replace the toxic ethidium bromide for staining dsDNA, ssDNA or RNA in agarose gels or polyacrylamide gels.

For the recommended final concentration, simply add 4 drops à 0.030 ml from the bottle for every 100 to 120 ml of gel solution. For the most accurate and consistent results, hold the dropper bottle vertically and squeeze slowly until the forming drop falls from the tip.

STORAGE

Store at room temperature.

The dropper bottle is specially designed to exclude damaging UV light. GelRed™ should be shielded from light and exposure to light should be avoided during long-term storage.

The Olerup SSP[®] GelRed[™] dropper bottle should be stored at room temperature. At low temperatures, such as +4°C, dye precipitation may occur. Should this occur, heat the solution in a water bath at +45°C to +50°C for two minutes and/or vortex the solution.

DISPOSAL

Not classified as hazardous waste, thus can be safely disposed of down the drain or as regular trash. Consult local, state or national regulations for proper disposal.

CAUTIONS

The dye is noncytotoxic and nonmutagenic at concentrations well above the working concentrations used in gel staining. For further information, consult the MSDS for this product. GelRedTM is impermeable to latex gloves and cell membranes.

A complete safety report on GelRedTM may be downloaded from www.biotium.com.

The UV light from sources used for visualization of GelRedTM stained DNA is damaging to your eyes. Always wear appropriate protective eyewear when using these instruments.

Material Safety Data Sheet Olerup SSP[®] GelRedTM Dropper Bottle

Chemical Product and Company Identification

Date of Issue: 2010-06-30

Product Name: Olerup SSP® GelRedTM Dropper Bottle

Product number: 103.302-05

Manufacturer: Olerup SSP AB, Hasselstigen 1, SE-133 33 Saltsjöbaden, Sweden

Tel: +46 8 717 88 27 Fax: +46 8 717 88 18

Composition and Information on Ingredients

Component	Chemical Name	Weight %	CAS No.	EINECS No.
GelRed TM	Proprietary	Proprietary	N.A.	N.A.
Water	dihydrogen oxide	Proprietary	7732-18-5	231-791-2

This product is not classified according to the EU regulations

Hazards Identification

Emergency overview: Handle with care – substance has not been fully tested.

First Aid Measures

Potentially harmful; avoid prolonged or repeated exposure. Wash hands thoroughly after handling. If eye or skin contact occurs, wash affected areas with water for 15 minutes and seek medical advice. If inhaled, move individual to fresh air and seek medical advice. If swallowed, seek medical advice.

Fire Fighting Measures

Use carbon dioxide, dry chemical extinguishers, foam extinguishers or water. An approved self-contained breathing apparatus and protective clothing are recommended.

Accidental Release Measures

Use appropriate protective equipment and methods to clean up spilled substance promptly. Absorb spill onto an appropriate material. Collect and dispose of all waste in accordance with applicable laws.

Handling and Storage

Store at room temperature. The dropper bottle is specially designed to exclude damaging UV light. GelRedTM should be shielded from light and exposure to light should be avoided during long-term storage. The Olerup SSP[®] GelRedTM dropper bottle should be stored 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.

Exposure Controls and Personal Protection

Gloves, protective clothing and eyewear should be worn and safe laboratory practices followed.

ACGIH/OSHA Permissible Exposure Limit Data: Not determined

Physical and Chemical Properties

Form: Liquid
Color: Dark red
Odour: Not determined

Solubility in/ miscibility with water: High

pH in solution (20°C):

Density (20°C):

Not determined

Not determined

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Stability and Reactivity

Thermal Decomposition: No decomposition if used according to specifications

Dangerous Reactions: No dangerous reactions identified

Dangerous Products of Decomposition: No dangerous decomposition products identified

Toxicological Information RTECS Number: None known

Tocixity: GelRed was subjected to a series of tests both by Biotium and by three independent testing services to assess the dye's safety for routine handling and disposal. These tests include: 1) glove penetration test; 2) cell membrane permeability and cytotoxicity test; 3) Ames test; and 4) environmental safety tests. Test results confirm that the dye is impenetrable to both latex gloves and cell membranes. The dye is noncytotoxic and nonmutagenic at concentrations well above the working concentrations used in gel staining. Furthermore, GelRed has successfully passed environmental safety tests in compliance with CCR Title 22 Hazardous Waste Characterization. As a result, GelRed is not classified as hazardous waste, thus can be safely disposed of down the drain or as regular trash, providing convenience and reducing cost in waste disposal. However, since these tests were not performed on human, we still advise that researchers exercise precautions when handling the dye or any other DNA-binding molecules by wearing protective gears. For detailed test results on GelRed, you may download a complete safety report at www.biotium.com.

Health Hazards: See toxicity.

Potential Hazards: We are not aware of any potential hazards

Carcinogenicity: Not listed by NTP, IARC or OSHA

Ecological and Disposal Information

Not classified as hazardous waste, thus can be safely disposed of down the drain or as regular trash. Consult local, state or national regulations for proper disposal.

Transport Information

Hazards Class: Not determined

Identification Number: Not determined

Packing Group: Not classified

Proper Shipping Name (Technical Name): Not determined

Regulatory information

This product is not classified according to the EU regulations.

U.S Federal regulations:

TSCA: Not listed. SARA: Not regulated.

Clean Water Act (CWA): No products were found. Clean Air Act (CAA): No products were found.

WHMIS (Canada): Not controlled under WHMIS (Canada), no products found.

Other Information

The information provided above is believed to be correct to our best knowledge, but does not purport to be all inclusive, and shall be used only as a guide. This material is sold for laboratory purposes only and is not required to appear on the TSCA inventory. It is not intended for food, drug, household, agricultural or cosmetic use. Its use must be supervised by a technically qualified individual experienced in handling potentially hazardous chemicals. Olerup SSP AB shall not be held liable for any damage resulting from handling or contact with the above product.

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