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**MATERIAL SAFETY DATA SHEET**Date Revised: June 3, 2008

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**PRODUCT AND COMPANY INFORMATION**

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**Product Name:** GelGreen Nucleic Acid Stain, 10,000X in DMSO  
**Catalog Number:** 41004  
**Unit Size:** 0.5 mL  
**Manufacturer/Supplier:** Biotium, Inc.  
3423 Investment Blvd. Suite 8. Hayward, CA 94545, USA  
Phone: 1-510-265-1027, Fax: 1-510-265-1352  
Web: <http://www.biotium.com>

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**COMPOSITION AND INFORMATION ON INGREDIENTS**

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**INGREDIENT A:** GelGreen  
**Molecular Formula:** Proprietary  
**Molecular Weight:** Proprietary  
**CAS Number/Name:** Not applicable  
**INGREDIENT B:** DMSO  
**Molecular Formula:** C<sub>2</sub>H<sub>6</sub>OS  
**Molecular Weight:** 78.13  
**CAS Number/Name:** [67-68-5]

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**HAZARDS IDENTIFICATION**

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**Emergency Overview:** Handle with care—substance has not been fully tested.

**POTENTIAL HEALTH EFFECTS**

**Inhalation:** Not determined  
**Ingestions:** Not determined  
**Skin:** Not determined  
**Eyes:** Not determined  
**Chronic Exposures:** Not determined  
**Target Organs:** Not determined

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**FIRST AID MEASURES**

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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.

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**FIRE FIGHTING MEASURES**

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

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**ACCIDENTAL RELEASE MEASURES**

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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.

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**HANDLING AND STORAGE**

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Storage conditions are not critical.

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**EXPOSURE CONTROLS AND PERSONAL PROTECTION**

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

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**ACGIH/OSHA Permissible Exposure Limit Data:** Not determined

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**PHYSICAL AND CHEMICAL PROPERTIES**

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<b>Form:</b>	Dark Red Liquid
<b>Odor:</b>	Not determined
<b>Solubility in Water:</b>	Low (high for DMSO)
<b>Specific Gravity:</b>	Not determined. (1.101 for DMSO)
<b>pH:</b>	Not determined
<b>Boiling Point:</b>	Not determined. (189° C for DMSO)
<b>Melting Point:</b>	Not determined. (18.4° C for DMSO)
<b>Flash Point:</b>	Not determined. (94° C for DMSO)
<b>Vapor Pressure:</b>	Not determined. (0.42 mm 20° C for DMSO)

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**STABILITY AND REACTIVITY**

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**Thermal Decomposition:** No decomposition if used according to specifications

**Dangerous Reactions:** No dangerous reactions identified

**Dangerous Products of Decomposition:** No dangerous decomposition products identified

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**TOXICOLOGICAL INFORMATION**

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**RTECS Number:** None known

**Toxicity:** GelGreen 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, GelGreen has successfully passed environmental safety tests in compliance with CCR Title 22 Hazardous Waste Characterization. As a result, GelGreen 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 GelGreen, you may download a complete safety report at [www.biotium.com](http://www.biotium.com). For dimethyl sulfoxide, please download MSDS at <http://fscimage.fishersci.com/msds/07770.htm>

**Health Hazards:** See toxicity.

**Potential Hazards:** We are not aware of any potential hazards

**Carcinogenicity:** Not listed by NTP, IARC or OSHA

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**ECOLOGICAL INFORMATION**

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not classified as hazardous waste, thus can be safely disposed of down the drain or as regular trash, see **Section 11 Toxicity**

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**DISPOSAL CONSIDERATIONS**

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Consult local, state or national regulations for proper disposal.

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**TRANSPORT INFORMATION**

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**Hazards Class:** Not determined

**Identification Number:** Not determined

**Packing Group:** Not classified

**Proper Shipping Name (Technical Name):** Not determined

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**REGULATIONS**

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**US Toxic Substances Control Act (TSCA):** DMSO is listed

**US Other:** Not applicable

**EEC EINECS Number:** 200-664-3 for DMSO

**EEC Risk Statements:** For DMSO: Irritant R36/37/38 Irritating to eyes, respiratory system and skin. S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S36 Wear Suitable protective clothing. S23 Do not breathe vapor.

**Other Country Regulations:** For DMSO: German regulatory: 1WGK

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## OTHER INFORMATION

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**Disclaimer:** 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 research 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. Biotium shall not be held liable for any damage resulting from handling or contact with the above product.