

Material Safety Data Sheet

GRGreen Nucleic Acid Stain, Revision Date: 09-Mar-2009



1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

Identification Of The Substance/Preparation:

Trade Name: GRGreen Nucleic Acid Stain
Chemical Name: GRGreen stain in dimethylsulfoxide
Synonym: None
Canada PIN: None

Use Of The Substance:

For R&D/experimental use only

Company Identification:

Lab Supply Mall
InnoVita, Inc.
847 Quince Orchard Blvd
Suite H
Gaithersburg, MD, 20878
USA
Website: <http://www.labsupplymall.com>
Business Telephone: (240) 782-0004

2. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous/Non-hazardous Components

Chemical Name	EINECS #	CAS #	Weight%	EU Classification
Dimethylsulfoxide (DMSO)	200-664-3	67-68-5	99.5%	Xi: R36/37/38
GRGreen	-	-	0.5%	-

3. HAZARDS IDENTIFICATION

Emergency Overview: Colorless liquid. Combustible. Can cause irritation to eyes, skin, and upper respiratory system. DMSO is readily absorbed through skin and can increase the skin absorption of other materials.

Health Effects:

Inhalation: Vapors may cause irritation to the upper respiratory system. Symptoms may include coughing and scratchy throat.

Skin: Can cause irritation. Symptoms may include redness, rash, and itching.

Eyes: Can cause eye irritation. Symptoms may include redness, tearing, and pain.

Ingestion: May cause gastrointestinal irritation with nausea and discomfort.

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Chronic Effects/Target Organ Effects: DMSO can cause contact dermatitis on prolonged or repeated contact with skin; symptoms may include scaling, drying, and cracking of skin. DMSO has caused blood, liver, kidney, and ocular effects at high doses in animal exposure studies.

Medical Conditions Aggravated By Exposure: Existing skin conditions

Environmental Effects: None known

4. FIRST AID MEASURES

Skin Contact	Follow standard care for skin contact as needed. Immediately wash thoroughly with soap and water. Remove contaminated clothing and shoes. Get medical attention if symptoms develop. Wash clothing and shoes before reuse, or discard in a manner that limits further exposure.
Eye Contact	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately if irritation persists.
Ingestion	If swallowed, get medical attention immediately. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.
Inhalation	Follow standard care for a respiratory emergency as necessary. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately
Notes To Physician	Treat symptomatically

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media	Dry chemical, fire-fighting foam, water spray, or carbon dioxide for surrounding materials.
Special Exposure Hazards	Combustible liquid. Can release vapors that form explosive mixtures with air at temperatures at or above the product flash point. Containers or packagings may rupture violently under fire conditions. Keep away from sparks, heat, flames, and other ignition sources. Use with adequate ventilation. Bond containers when transferring large amounts of material at or above product flash point. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Follow all MSDS and label precautions even after container is emptied because they may contain product residues. Evacuate area and fight fire from safe distance.
Special Protective Equipment For Firefighters	Wear approved pressure-demand self-contained breathing apparatus and full protective gear.

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6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Remove all sources of ignition. Prevent skin/eye contact. Use personal protective equipment as needed. Isolate spill area, preventing entry by unauthorized persons.
Environmental Precautions	Minimize entry of material into sewers and drainage systems. Refer to permit discharge limitations if applicable.
Methods for Cleaning Up	Remove all sources of ignition. Clean up spills immediately, observing precautions in the material safety data sheet and label. Use absorbent materials if needed and dispose into a chemical waste container.

7. HANDLING AND STORAGE

Handling	Combustible liquid. Keep away from ignition sources such as sparks, heat, and flames. Use with adequate ventilation. Bond and ground all containers when transferring large amounts of material. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Follow all MSDS and label precautions even after containers or packagings are emptied because they may contain product residues.
Storage	Keep container closed when not in use. Avoid all ignition sources. Store frozen (-20°C). Protect material from light, especially in solution. Store in accordance with OSHA regulations, NFPA guidelines, or other requirements for combustible liquids..
Specific Uses	For R&D/experimental use only

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limit Values	None established
Exposure Controls	Use process enclosures, local exhaust ventilation, or other engineering controls as needed.
Respiratory Protection	Use an approved air-purifying respirator as needed. Consult with respirator manufacturer to determine respirator selection, use, and limitations.
Eye/Face Protection	Use safety glasses. Where contact with the eyes is likely, use chemical goggles.
Skin/Hand Protection	Use chemical gloves as needed. Use clean protective body covering clothing as needed to minimize contact with clothing and skin.

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9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Colorless liquid
Odor	Negligible
Flash Point	89°C
Viscosity	Not available
Solubility	High
Density (water = 1)	1.101
Partition Coefficient	Not available
Boiling Point	189°C
Melting Point	18°C
pH	Not available
Other	Autoignition temperature: 573°C
Vapor Density	2.7
Vapor Pressure	0.42 mm Hg
Product Name	GRGreen

10. STABILITY AND REACTIVITY

Stability	Stable.
Conditions To Avoid	Avoid contact with strong oxidizers, acids and bases. Avoid ignition sources
Materials To Avoid	Avoid contact with strong oxidizers, acids and bases.
Hazardous Decomposition Products	Oxides of carbon and sulphur

11. TOXICOLOGICAL INFORMATION

Dimethylsulfoxide (DMSO): Oral LD50: 14,500 mg/kg (rat); Dermal LD50: 40,000 mg/kg (rat); Skin irritation: 500mg /24-hrs. - mild (rabbit); Eye irritation: 500mg/24-hrs. - mild (rabbit); Genotoxicity: negative in the Ames assay, chromosomal aberrations assay, and sister chromatid exchange assays; DMSO has caused blood, liver, kidney, and ocular effects at high doses in animal exposure studies.

12. ECOLOGICAL INFORMATION

Cytotoxicity	Less than SYBR Safe (Invitrogen)
Mobility	Not available
Persistence And Degradability	Not available
Bioaccumulative Potential	Not available

13. DISPOSAL CONSIDERATIONS

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Dispose of unused product, residues, and containers according to local, regional, state, and national regulations.

14. TRANSPORT INFORMATION

Not expected to be hazardous for transport

15. REGULATORY INFORMATION

US Regulations:

This product meets the following SARA 311/312 hazard categories: acute, chronic

This product contains the following SARA 302 Extremely Hazardous Substances: none.

This product contains the following SARA 313 Toxic Chemicals: none.

This product contains the following CERCLA Hazardous Substances: none.

Not all components of this product are listed in the TSCA inventory. This product is for use in experimental/R&D applications only. Use only under the direct supervision of a technically qualified individual. Other uses are not authorized.

EU Regulations:

This preparation meets the following dangerous preparations classification criteria under 1999/45/EC.

Xi; R36/37/38: Irritating to eyes, respiratory system and skin.

The following safety phrases apply:

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S37/39: Wear suitable gloves and eye/face protection.

Not all components of this product are listed on EINECS.

Canadian Regulations:

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and it contains the information required by the CPR. This product meets WHMIS classification criteria D2B. DMSO is listed in the ingredient disclosure list (1%). Not all components of this product are listed on the DSL.

Product Name: GRGreen

16. OTHER INFORMATION

NFPA/HMIS Ratings: Health = 2; Fire = 2; Reactivity = 0; NFPA/Special = None

Other Information:

MSDS Revisions: 3/2009; Rev. 2.0

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