

Material Safety Data Sheet

GelStar® Nucleic Acid Gel Stain

Version 11

Revision Date 2012.11.02

Print Date 2013.01.30

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : GelStar® Nucleic Acid Gel Stain
Product Use Description : For R&D use only. Not for pharmaceutical, household or other uses.

Company : **Lonza Inc. - Rockland**
191 Thomaston Street
Rockland, ME 04841-2994
USA
Business Telephone: (207) 594-3400

Lonza Inc. - Walkersville
8830 Biggs Ford Road
Walkersville, MD 21793-0127
USA
Business Telephone (301) 898-7025

Emergency telephone number : 703-527-3887 (US: 800-424-9300)

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Caution

Form: solution, Colour: colourless, Odour: odourless

OSHA Hazards : COMBUSTIBLE LIQUID

Potential Health Effects

Primary Routes of Entry : Eyes
Skin

Aggravated Medical Condition : No hazards to be specially mentioned.

Target Organs : No hazards to be specially mentioned.

Inhalation : No hazards to be specially mentioned.

Skin : May cause skin irritation.

Eyes : May cause eye irritation.

Ingestion : May be harmful if swallowed.

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SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No.	Weight percent
Dimethyl sulfoxide	67-68-5	> 99.90

SECTION 4. FIRST AID MEASURES

First aid procedures

- Inhalation : No special precautions required.
- Skin contact : Wash with water and soap as a precaution.
If skin irritation persists, call a physician.
- Eye contact : Immediately flush eye(s) with plenty of water.
If eye irritation persists, consult a specialist.
- Ingestion : Immediately give large quantities of water to drink.
Do not induce vomiting without medical advice.
Never give anything by mouth to an unconscious person.

SECTION 5. FIREFIGHTING MEASURES

Flammable properties

- Flash point : 192 °F (89 °C)
Remarks: Solvent
- Ignition temperature : 518 °F (270 °C)
Remarks: Solvent
- Lower explosion limit : 2.6 %(V)
Remarks: Solvent
- Upper explosion limit : 42 %(V)
Remarks: Solvent

Fire fighting

- Suitable extinguishing media : Water spray
Dry powder
Foam
- Further information : Use water spray to cool unopened containers.

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Protective equipment and precautions for firefighters

Specific hazards during firefighting : Heating or fire can release toxic gas.

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions : Use personal protective equipment.

Environmental precautions : Prevent product from entering drains.

Methods for containment / Methods for cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

SECTION 7. HANDLING AND STORAGE**Handling**

Handling : No special precautions required.

Advice on protection against fire and explosion : Take precautionary measures against static discharges.

Storage

Requirements for storage areas and containers : Keep frozen or refrigerated.
Keep container closed when not in use.
Remove all sources of ignition.
To maintain product quality, do not store in heat or direct sunlight.

Storage temperature : -4 °F (-20 °C)

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Exposure Guidelines****Engineering measures**

Engineering measures : Use only in area provided with appropriate exhaust ventilation.

Personal protective equipment

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Eye protection	: Tightly fitting safety goggles
Hand protection	: Protective gloves
Skin and body protection	: Choose body protection according to the amount and concentration of the dangerous substance at the work place. No special protective equipment required.
Respiratory protection	: No personal respiratory protective equipment normally required.
Hygiene measures	: Handle in accordance with good industrial hygiene and safety practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**Appearance**

Form	: solution
Colour	: colourless
Odour	: odourless

Safety data

Flash point	: 192 °F (89 °C) Note: Solvent
Ignition temperature	: 518 °F (270 °C) Remarks: Solvent
Lower explosion limit	: 2 %(V) Note: Solvent
Upper explosion limit	: 42 %(V) Note: Solvent
pH	: Note: not applicable
Freezing point	: 65.1 °F (18.4 °C) Note: Solvent
Boiling point/boiling range	: 372 °F (189 °C) Note: Solvent
Vapour pressure	: 0.56 hPa (0.42 mmHg)
Density	: 1.101 g/cm ³

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Water solubility : Note: completely miscible

SECTION 10. STABILITY AND REACTIVITY

Conditions to avoid : 89°C
Remarks: Keep away from heat and sources of ignition.

Materials to avoid : Remarks: Inorganic acid chlorides
Strong acids and oxidizing agents
Strong reducing agents
Alkali metals
hydrogen bromide

Hazardous decomposition products : Note: In case of fire hazardous decomposition products may be produced such as:
Carbon monoxide
Carbon dioxide (CO₂)
nitrogen oxides (NO_x)
Sulphur oxides
Formaldehyde
Other hazardous decomposition products may be formed.

Thermal decomposition : Remarks: Heating can release vapours which can be ignited.

Hazardous reactions : No dangerous reaction known under conditions of normal use.

SECTION 11. TOXICOLOGICAL INFORMATION

Further information : No data is available on the product itself.

The following toxicological data refer to:

Dimethyl sulfoxide (CAS-No.: 67-68-5)

Acute oral toxicity : LD50 Oral rat
Dose: 14,500 mg/kg

Acute inhalation toxicity : LC50 rat
Exposure time: 4 h
Dose: 1,600 mg/l

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SECTION 12. ECOLOGICAL INFORMATION

Additional ecological information : No data is available on the product itself.

The following ecotoxicological data refer to:

Dimethyl sulfoxide (CAS-No.: 67-68-5)

Acute Fish toxicity : LC50
Species: Pimephales promelas (fathead minnow)
Concentration: 34,000.00 mg/l
Exposure time: 96 h

LC50
Species: Oncorhynchus mykiss (rainbow trout)
Concentration: 35,000.00 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50
Species: Daphnia pulex (Water flea)
Concentration: 27,500.00 mg/l

SECTION 13. DISPOSAL CONSIDERATIONS

Further information : Dispose of in accordance with local regulations.
Contact waste disposal services.

SECTION 14. TRANSPORT INFORMATION

DOT
Not dangerous goods

TDG
Not dangerous goods

IATA
Not dangerous goods

IMDG-CODE
Not dangerous goods

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RID

Not dangerous goods

SECTION 15. REGULATORY INFORMATION

OSHA Hazards : Combustible Liquid
WHMIS Classification : B3 Combustible Liquid
Disclosure according to Ingredient Disclosure List.

TSCA Status : Product falls under research and development.
DSL Status : Product falls under research and development.
SARA 311/312 Hazards : Fire Hazard

EPCRA - EMERGENCY PLANNING COMMUNITY RIGHT - TO - KNOW

SARA 302 Components : SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components : SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

US State Regulations

Massachusetts Right To Know Components : No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components : No components are subject to the Pennsylvania Right to know act

New Jersey Right To Know Components : No components are subject to the New Jersey Right to know act

California Prop. 65 Components : This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

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.

SECTION 16. OTHER INFORMATION**Further information**

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HMIS Classification : Health hazard: 1
Flammability: 2
Reactivity: 0

Further information : GelStar is a registered trademark of FMC Corp.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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