

Safety data sheet
according to 1907/2006/EC, Article 31


Printing date 18.02.2014


Revision: 18.02.2014


1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
- **Trade name:**
Nuclear-ID® Blue/Red cell viability reagent (GFP-Certified®)
- **Article number:** ENZ-53005
- **CAS Number:**
67-68-5
Applies to the solvent DMSO.
- **EC number:**
200-664-3
- **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the preparation:** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Enzo Life Sciences, Inc.
10 Executive Boulevard
Farmingdale, NY 11735
U.S.A.
msds@enzolifesciences.com
- **Further information obtainable from:**
Customer service
During normal business hours.
U.S. +800-942-0430
International +41 61 926 8989
- **Emergency telephone number:**
U.S. +1 800-255-3924
International +01-813-248-0585

2 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
 GHS07
Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2 H319 Causes serious eye irritation.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC:**
 Xi; Irritant
R36/38: Irritating to eyes and skin.
- **Information concerning particular hazards for human and environment:** Not applicable.

- **Label elements**
- **Labelling according to Regulation (EC) No 1272/2008:**
The substance is classified and labelled according to the CLP regulation.
- **Hazard pictograms:**

GHS07
- **Signal word:** Warning

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- **Hazard-determining components of labelling:** dimethyl sulfoxide
- **Hazard statements:**
 - H315 Causes skin irritation.
 - H319 Causes serious eye irritation.
- **Precautionary statements**
 - P280 Wear protective gloves/protective clothing/eye protection/face protection.
 - P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 - P321 Specific treatment (see on this label).
 - P362 Take off contaminated clothing.
 - P332+P313 If skin irritation occurs: Get medical advice/attention.
 - P337+P313 If eye irritation persists: Get medical advice/attention.
- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Substances**
- **CAS No. Description:**
 - 67-68-5 dimethyl sulfoxide
- **Identification number(s):** Not applicable
- **EC number:** 200-664-3
- **Additional information:**
 - The dyes are dissolved in DMSO, which is the component determining the hazardousness of the mixture.

4 First aid measures

- **Description of first aid measures**
- **General information:**
 - In case of accident, seek medical advice immediately and show the label and the MSDS where possible.
- **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:**
 - Immediately wash with water and soap and rinse thoroughly.
 - Remove contaminated clothing.
- **After eye contact:**
 - Rinse opened eye for several minutes under running water. Check for and remove contact lenses. If symptoms persist, consult a doctor.
- **After ingestion:** If symptoms persist consult doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed**
 - No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
 - In case of accident, seek medical advice immediately and show the label and the MSDS where possible.

5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
 - CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.

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- **Advice for firefighters**
- **Protective equipment:**
Wear self-contained respiratory protective device.
Do not inhale explosion gases or combustion gases.
Wear fully protective suit.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures:**
Wear protective clothing.
- **Environmental precautions:** No special measures required.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling:** No special precautions are necessary if used correctly.
- **Information about fire - and explosion protection:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
Store tightly sealed in a cool, dry and well ventilated location (see label for storage temperature and additional specific information).
Keep away from heat, sources of ignition and incompatibles such as oxidizing agents.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Store tightly sealed in a cool, dry and well ventilated location (see label for storage temperature and additional specific information).
- **Information about storage in one common storage facility:**
Do not store in warm environment or in contact with flammable or oxidizing substances.
- **Further information about storage conditions:**
Keep container tightly sealed.
Store under lock and key and with access restricted to technical experts or their assistants only.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:** Not required.
- **Additional information:** The lists valid during the making were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
- **Respiratory protection:** Not required.

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Protection of hands:


Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/the preparation/the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection:


Tightly sealed goggles

9 Physical and chemical properties

Information on basic physical and chemical properties
General Information
Appearance:

Form:	Fluid
Colour:	Colourless
Odour:	Characteristic
Odour threshold:	Not determined.

pH-value: Not determined.

Change in condition

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.

Flash point: Not applicable.

Flammability (solid, gaseous): Not applicable.

Ignition temperature:

Decomposition temperature: Not determined.

Self-igniting: Not determined.

Danger of explosion: Product does not present an explosion hazard.

Explosion limits:

Lower:	Not determined.
Upper:	Not determined.

Vapour pressure: Not determined.

Density: Not determined.

Relative density Not determined.

Vapour density Not determined.

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- | | |
|---|--|
| · Evaporation rate | Not determined. |
| · Solubility in / Miscibility with water: | Not determined. |
| · Partition coefficient (n-octanol/water): | Not determined. |
| · Viscosity: | |
| Dynamic: | Not determined. |
| Kinematic: | Not determined. |
| Organic solvents: | >99 % |
| · Other information | No further relevant information available. |

10 Stability and reactivity

- **Reactivity**
- **Chemical stability:** Stable. Avoid strong oxidizing agents.
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **Possibility of hazardous reactions:** No dangerous reactions known.
- **Conditions to avoid:** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

- **LD/LC50 values relevant for classification:**

67-68-5 dimethyl sulfoxide

Oral	LD50 - Oral	14500 mg/kg (rat)
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- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability:** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential:** No further relevant information available.
- **Mobility in soil:** No further relevant information available.
- **Additional ecological information:**
- **General notes:** Not known to be hazardous to water.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects:** No further relevant information available.

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13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:**
All waste must be handled in accordance with local, state and federal regulations. This material and its container must be disposed of in a safe way.

14 Transport information

- | | |
|---|-----------------|
| · UN-Number | |
| · ADR, ADN, IMDG, IATA | Void |
| · UN proper shipping name | |
| · ADR, ADN, IMDG, IATA | Void |
| · Transport hazard class(es) | |
| · ADR, ADN, IMDG, IATA | |
| · Class | Void |
| · Packing group | |
| · ADR, IMDG, IATA | Void |
| · Environmental hazards: | |
| · Marine pollutant: | No |
| · Special precautions for user: | Not applicable. |
| · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: | Not applicable. |
| · UN "Model Regulation": | - |

15 Regulatory information

- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. For research use only. Not for drug, household or other uses.

- **Department issuing MSDS:** Customer service
- **Contact:** tel. +1 610-941-0430
- **Abbreviations and acronyms:**
 RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
 ICAO: International Civil Aviation Organization
 ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 IMDG: International Maritime Code for Dangerous Goods
 IATA: International Air Transport Association
 GHS: Globally Harmonized System of Classification and Labelling of Chemicals
 EINECS: European Inventory of Existing Commercial Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent