GE Healthcare

# Material Safety Data Sheet

Australia
English

## 1 . Identification of the material and supplier

**Product name** **Single-Stranded DNA Binding Proten (SSB) (cloned), 100 µg**

**Catalogue Number** E70032Y

90E70032Y

**Company details**

**Manufacturer**
GE Healthcare UK Ltd
Amersham Place
Little Chalfont
Buckinghamshire HP7 9NA
England
+44 0870 606 1921

**Supplier**
GE Healthcare Bio-Sciences
Building 4B, Parklands Estate
21 South Street
Rydalmere NSW 2116
Australia
+61 2 8820 8299

**Emergency telephone number** **000** and +61 2 9846 4000

**ADG** -

**Uses**

**Area of application** Industrial applications.
**Material uses** Analytical chemistry. Research.
**Product type** Liquid.

## 2 . Hazards identification

**Classification** Xi; R36/37/38

**Risk phrases** R36/37/38- Irritating to eyes, respiratory system and skin.

**Statement of hazardous/dangerous nature**

HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS.

## 3 . Composition/information on ingredients

**Mixture** Yes.

| Ingredient name | CAS number | Concentration |
|---|---|---|
| glycerol | 56-81-5 | 50 |

**Additional information**

Other ingredients, determined not to be hazardous according to NOHSC criteria, and not dangerous according to the ADG Code, make up the product concentration to 100%.

## 4 . First-aid measures

**First-aid measures**

**Eye contact** In case of contact with eyes, rinse immediately with plenty of water. Get medical attention if irritation occurs.
**Skin contact** Wash with soap and water. Get medical attention if symptoms appear.
**Inhalation** If inhaled, remove to fresh air. Get medical attention if symptoms appear.
**Ingestion** Do not ingest. If potentially dangerous quantities of this material have been swallowed, call a physician immediately. Get medical attention if symptoms appear.
**Protection of first-aiders** No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

## 5 . Fire-fighting measures

**Extinguishing media**

**Suitable** Use an extinguishing agent suitable for the surrounding fire.

**Not suitable** None known.

**Special exposure hazards** Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
In a fire or if heated, a pressure increase will occur and the container may burst.

**Special protective equipment for fire-fighters** Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

**Hazardous combustion products** Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
halogenated compounds
metal oxide/oxides

## 6 . Accidental release measures

**Personal precautions** No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).

**Environmental precautions** Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

**Methods for cleaning up** Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

**Small spill** Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

## 7 . Handling and storage

**Handling** Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

**Storage** Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

## 8 . Exposure controls/personal protection

**Occupational exposure limits**

| Ingredient name | Occupational exposure limits |
|---|---|
| glycerol | **NOHSC (Australia, 8/2005).** TWA: 10 mg/m³ 8 hour(s). |

**Recommended monitoring procedures** If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

**Engineering measures** Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

**Hygiene measures** Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Personal protection**

**Eyes** Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.

**Hands** Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

**Respiratory** A respirator is not needed under normal and intended conditions of product use.

**Skin** Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

| | |
|---|---|
| **Environmental exposure controls** | Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels. |

## 9 . Physical and chemical properties

| | |
|---|---|
| **Physical state** | Liquid. |
| **Colour** | Colourless. |
| **Odour** | Odourless. |
| **pH** | 7.5 [Conc. (% w/w): 100%] |
| **Solubility** | Easily soluble in the following materials: cold water and hot water. |

## 10 . Stability and reactivity

| | |
|---|---|
| **Stability** | The product is stable. |
| **Materials to avoid** | No specific data. |
| **Hazardous decomposition products** | Under normal conditions of storage and use, hazardous decomposition products should not be produced. |

## 11 . Toxicological information

**Potential acute health effects**

| | |
|---|---|
| **Inhalation** | Irritating to respiratory system. |
| **Ingestion** | Irritating to mouth, throat and stomach. |
| **Skin contact** | Irritating to skin. |
| **Eye contact** | Irritating to eyes. |

**Acute toxicity**

| Product/ingredient name | Result | Species | Dose | Exposure |
|---|---|---|---|---|
| glycerol | LD50 Dermal | Rabbit | >10 g/kg | - |
| | LD50 Intraperitoneal | Rat | 4420 mg/kg | - |
| | LD50 Intravenous | Rat | 5566 mg/kg | - |
| | LD50 Oral | Rat | 12600 mg/kg | - |
| | LD50 Subcutaneous | Rat | 100 mg/kg | - |
| | LDLo Intramuscular | Rat | 10 mg/kg | - |
| | TDLo Intramuscular | Rat | 8 mL/kg | - |
| | TDLo Intramuscular | Rat | 5000 mg/kg | - |

**Conclusion/Summary** Not available.

**Potential chronic health effects**

**Chronic toxicity**

**Conclusion/Summary** Not available.

**Carcinogenicity**

**Conclusion/Summary** Not available.

**Mutagenicity**

**Conclusion/Summary** Not available.

**Teratogenicity**

**Conclusion/Summary** Not available.

**Reproductive toxicity**

| | |
|---|---|
| **Conclusion/Summary** | Not available. |
| **Chronic effects** | No known significant effects or critical hazards. |
| **Carcinogenicity** | No known significant effects or critical hazards. |
| **Mutagenicity** | No known significant effects or critical hazards. |
| **Teratogenicity** | No known significant effects or critical hazards. |
| **Developmental effects** | No known significant effects or critical hazards. |
| **Fertility effects** | No known significant effects or critical hazards. |

**Over-exposure signs/symptoms**

| | |
|---|---|
| **Inhalation** | Adverse symptoms may include the following:<br>respiratory tract irritation<br>coughing |
| **Ingestion** | No specific data. |
| **Skin** | Adverse symptoms may include the following: |
| **Eyes** | irritation<br>redness |

Adverse symptoms may include the following:
irritation
watering
redness

**Target organs** Contains material which may cause damage to the following organs: kidneys, upper respiratory tract, skin, eye, lens or cornea, stomach.

## 12 . Ecological information

**Environmental effects** No known significant effects or critical hazards.

**Aquatic ecotoxicity**

| Product/ingredient name | Test | Result | Species | Exposure |
|---|---|---|---|---|
| glycerol | - | Acute LC50 54 to 57 ml/L Fresh water | Fish - Rainbow trout,donaldson trout - Oncorhynchus mykiss - 0.9 g | 96 hours |

**Conclusion/Summary** Not available.

**Biodegradability**

**Conclusion/Summary** Not available.

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|---|---|---|---|
| glycerol | - | >60%; 28 day(s). | Readily |

**Other adverse effects** No known significant effects or critical hazards.

## 13 . Disposal considerations

**Methods of disposal** The generation of waste should be avoided or minimised wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

## 14 . Transport information

**International transport regulations**

Not classified.

-

## 15 . Regulatory information

**Standard for the Uniform Scheduling of Drugs and Poisons**

Not regulated.

**Control of Scheduled Carcinogenic Substances**

| Ingredient name | Schedule |
|---|---|
| Not available. | |

**Australia inventory (AICS)** All components are listed or exempted.
**EU Classification** Xi; R36/37/38
**HCS Classification** Irritating material
Target organ effects

## 16 . Other information

**History**

| | | | |
|---|---|---|---|
| **Date of printing** | 29 June 2009 | **Date of previous issue** | 05 April 2006 |
| **Date of issue** | 29 June 2009 | **Version** | 3 |

Indicates information that has changed from previously issued version.

Enquiries regarding MSDS content should be directed to: our local sales office.

**Notice to reader**

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.
Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.