

Safety Data Sheet (SDS) According to the REACH Regulation (EC) No. 1907/2006

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Version: 1

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

1.1. Product identifier

Product No11940Product nameCytochrome c (D18C7) Rabbit mAb

Contains

Chemical name glycerol (30-60) sodium azide (<0.02) Index No. Not Listed 011-004-00-7 CAS No 56-81-5 26628-22-8

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses

For Research Use Only. Not for Use in Diagnostic Procedures.

1.3. Details of the supplier of the safety data sheet

Importer Cell Signaling Technology Europe B.V. Dellaertweg 9b 2316 WZ Leiden The Netherlands TEL: +31 (0)71 7200 200 FAX: +31 (0)71 891 0019

Cell Signaling Technology, Inc. 3 Trask Lane Danvers, MA 01923 United States TEL: +1 978 867 2300 FAX: +1 978 867 2400

Website E-mail Address www.cellsignal.com info@cellsignal.eu

Manufacturer

1.4. Emergency telephone number

CHEMTREC 24 hours a day, 7 days a week, 365 days a year +1 703 527 3887 (INTERNATIONAL) +1 800 424 9300 (NORTH AMERICA)

Europe

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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

This substance is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

2.2. Label elements

Signal word None.

Hazard statement(s) None.

Precautionary statement(s) None.

2.3. Other hazards

Chemical nature

May produce an allergic reaction.

For the full text of the H-phrases & EUH-phrases mentioned in this Section, see Section 16

Mixture

SECTION 3: Composition/information on ingredients

| Chemical name | CAS No | Weight-% | EC No | Classification (1272/2008) | REACH Registration Number |
|---------------|------------|----------|-----------|--|---------------------------------|
| glycerol | 56-81-5 | 30-60 | 200-289-5 | - | no data available |
| sodium azide | 26628-22-8 | <0.02 | 247-852-1 | Acute Tox. 2 (H300) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) (EUH032) | no data available |

For the full text of the H-phrases & EUH-phrases mentioned in this Section, see Section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

| General advice | Use first aid treatment according to the nature of the injury. When symptoms persist or in all cases of doubt seek medical advice. |
|----------------|--|
| Inhalation | Move to fresh air. |
| Skin contact | Wash skin with soap and water. |
| Eye contact | Rinse thoroughly with plenty of water, also under the eyelids. |
| Ingestion | Clean mouth with water and afterwards drink plenty of water. |

4.2. Most important symptoms and effects, both acute and delayed

Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain, or flushing.

4.3. Indication of any immediate medical attention and special treatment needed

Notes to physician

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

| Suitable Extinguishing Media | Use extinguishing measures that are appropriate to local circumstances and the |
|------------------------------|--|
| | surrounding environment. |

Unsuitable Extinguishing Media No information available.

5.2. Special hazards arising from the substance or mixture

No information available.

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective suit. Use personal protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

| For non-emergency personnel | Avoid contact with skin, eyes and clothing. Use personal protective equipment. For personal |
|-----------------------------|---|
| | protection see section 8. |
| For emergency responders | Use personal protection recommended in Section 8. |

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Prevent entry into waterways, sewers, basements or confined areas.

6.3. Methods and material for containment and cleaning up

| Methods for containment | Prevent further leakage or spillage if safe to do so. |
|-------------------------|---|
| Methods for cleaning up | Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. |

6.4. Reference to other sections

See Sections 8 & 13 for additional information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice. Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use.

7.2. Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

7.3. Specific end use(s)

Use as a laboratory reagent.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| Chemical name | European Union | United Kingdom | France | Spain | Germany |
|---------------|---------------------------|----------------------------|---------------------------|---------------------------|----------------------------|
| glycerol | | STEL 30 mg/m ³ | TWA 10 mg/m ³ | TWA 10 mg/m ³ | Ceiling / Peak: 400 |
| | | TWA 10 mg/m ³ | - | - | mg/m ³ |
| | | - | | | TWA: 200 mg/m ³ |
| sodium azide | TWA 0.1 mg/m ³ | STEL 0.3 mg/m ³ | TWA 0.1 mg/m ³ | TWA 0.1 mg/m ³ | TWA: 0.2 mg/m ³ |

| | STEL 0.3 mg/m ³ S* | TWA 0.1 mg/m³ Skin | STEL 0.3 mg/m ³ P* | STEL 0.3 mg/m ³ S* | Ceiling / Peak: 0.4 mg/m ³ |
|---------------|---|--|--|---|---|
| Chemical name | Italy | Portugal | Netherlands | Finland | Denmark |
| glycerol | | TWA 10 mg/m ³ | | TWA 20 mg/m ³ | |
| sodium azide | TWA 0.1 mg/m ³ STEL 0.3 mg/m ³ Pelle* | TWA 0.1 mg/m ³ STEL 0.3 mg/m ³ Ceiling 0.29 mg/m ³ Ceiling 0.11 ppm C(A4) P* | Huid* STEL 0.3 mg/m ³ TWA 0.1 mg/m ³ | TWA 0.1 mg/m ³ STEL 0.3 mg/m ³ iho* | TWA 0.1 mg/m³ H* |
| Chemical name | Austria | Switzerland | Poland | Norway | Ireland |
| glycerol | | SS-C** TWA 50 mg/m ³ STEL 100 mg/m ³ | TWA 10 mg/m ³ | | TWA 10 mg/m ³ STEL 30 mg/m ³ |
| sodium azide | H* STEL 0.3 mg/m ³ TWA 0.1 mg/m ³ | TWA 0.2 mg/m ³ STEL 0.4 mg/m ³ | TWA 0.1 mg/m ³ STEL 0.3 mg/m ³ | TWA 0.1 mg/m ³ STEL 0.1 mg/m ³ | TWA 0.1 mg/m ³ STEL 0.3 mg/m ³ Skin |

8.2. Exposure controls

Appropriate engineering controls

Showers, eyewash stations, and ventilation systems.

| Individual protection measu | ires, such as personal protective equipment |
|-----------------------------|--|
| Eye/face protection | Safety glasses with side-shields |
| Skin protection | Wear protective gloves and protective clothing |
| Hand protection | Impervious gloves. |
| Other | Wear suitable protective clothing. |
| Respiratory protection | When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. |

Environmental Exposure Controls No information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| Physical state Color Odor | Liquid - Clear Colorless No information available | |
|--|---|---------------------------|
| <u>Property</u> | <u>Values</u> | Remarks • Method |
| рН | 7.5 | @ 20 °C |
| Melting point/freezing point | No information available | No information available |
| Boiling point or initial boiling point | No information available | No information available |
| and boiling range | | |
| Flash point | No information available | No information available. |
| Evaporation rate | No information available | No information available |
| Flammability | No information available | No information available |
| Upper/lower flammability or | No information available | No information available |
| explosive limits | | |
| Vapor pressure | No information available | No information available |
| Relative vapor density | No information available | No information available |
| Density and/or relative density | No information available | No information available |
| Solubility | No information available. | No information available |
| Partition coefficient: n-octanol/water | No information available | No information available |
| Autoignition temperature | No information available | No information available |

Decomposition temperature Viscosity Explosive properties Oxidizing properties

9.2. Other information Softening point Molecular Weight Solubility in other solvents VOC content Liquid Density No information available No information available No information available No information available

No information available No information available No information available No information available No information available No information available. No information available No information available No information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

| Hazardous polymerization | Hazardous polymerization does not occur. |
|--------------------------|--|
| Hazardous reactions | None under normal processing. |

10.4. Conditions to avoid

Extremes of temperature and direct sunlight. Over a period of time, sodium azide may react with copper, lead, brass, or solder in plumbing systems to form an accumulation of the HIGHLY EXPLOSIVE compounds of lead azide & copper azide.

10.5. Incompatible materials

Strong oxidizing agents, Strong acids.

10.6. Hazardous decomposition products

Nitrogen oxides (NOx).

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

This product is for experimental uses only. The product has not been completely analyzed and all of the hazards may not be known. Please use caution while handling this product.

| Chemical name | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|---------------|---------------------|----------------------------------|----------------------|
| glycerol | = 12600 mg/kg (Rat) | > 10 g/kg (Rabbit) | > 570 mg/m³ (Rat)1 h |
| sodium azide | = 27 mg/kg (Rat) | = 20 mg/kg (Rabbit) = 50 mg/kg (| - |
| | | Rat) | |

Information on likely routes of exposure

| Inhalation | Avoid breathing vapors or mists. |
|-------------|----------------------------------|
| Eye contact | Avoid contact with eyes. |

| Skin contact | Avoid contact with skin. |
|-----------------------------------|---|
| Ingestion | Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. |
| Symptoms | Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain, or flushing. |
| Skin corrosion/irritation | No information available. |
| Serious eye damage/eye irritation | No information available. |
| Sensitization | No information available. |
| Mutagenic effects | No information available. |
| Carcinogenicity | No information available. |
| Reproductive toxicity | No information available. |
| STOT - single exposure | No information available. |
| STOT - repeated exposure | No information available. |
| Aspiration Hazard | No information available. |

11.2. Information on other hazards

No information available.

SECTION 12: Ecological information

12.1. Toxicity

| Chemical name | Toxicity to algae | Toxicity to fish | Toxicity to daphnia and other |
|---------------|--------------------------------------|-----------------------------------|------------------------------------|
| | | | aquatic invertebrates |
| glycerol | - | LC50 51 - 57 mL/L (Oncorhynchus | EC50 500 mg/L (Daphnia magna) 24 |
| | | mykiss) 96 h | h |
| sodium azide | EC50 0.35 mg/L | LC50 0.8 mg/L (Oncorhynchus | LC100 1 mg/L (Orconectes rusticus) |
| | (Pseudokirchneriella subcapitata) 96 | mykiss) 96 h LC50 5.46 mg/L | 96 h |
| | h | (Pimephales promelas) 96 h LC50 | |
| | | 0.7 mg/L (Lepomis macrochirus) 96 | |
| | | h | |

12.2. Persistence and degradability

No information available

12.3. Bioaccumulative potential

Bioaccumulation

| Chemical name | Octanol-Water Partition Coefficient |
|---------------|-------------------------------------|
| glycerol | -1.76 |

Bioconcentration factor (BCF) No information available.

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

No information available.

12.6. Endocrine disrupting properties

This product does not contain any known or suspected endocrine disruptors

12.7. Other adverse effects

No information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

| Waste from residues / unused products | Dispose of in accordance with local regulations. |
|--|---|
| Contaminated packaging | Empty containers should be taken to an approved waste handling site for recycling or disposal. |
| Other information | Waste codes should be assigned by the user based on the application for which the product was used. |

SECTION 14: Transport information

IMDG/IMO

| 14.1 UN number | Not regulated | |
|--|--|--|
| 14.2 UN proper shipping name | Not regulated | |
| 14.3 Transport hazard class(es) | Not regulated | |
| 14.4 Packing group | Not regulated | |
| 14.5 Environmental hazards | None | |
| 14.6 Special precautions for user | None | |
| 14.7 Maritime transport in bulk | Not regulated | |
| according to IMO instruments | | |
| ADR/RID 14.1 UN number 14.2 UN proper shipping name 14.3 Transport hazard class(es) 14.4 Packing group 14.5 Environmental hazards | Not regulated Not regulated Not regulated Not regulated None | |
| 14.6 Special precautions for user | None | |
| ΙΑΤΑ | | |
| 14.1 UN number | Not regulated | |
| 14.2 UN proper shipping name | Not regulated | |
| 14.3 Transport hazard class(es) | Not regulated | |
| 14.4 Packing group | Not regulated | |
| 14.5 Environmental hazards | None | |
| 14.6 Special precautions for user | None | |
| ···· ································· | | |

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Candidate List of Substances of Very High Concern for Authorization Information

This product does not contain Substances of Very High Concern (SVHC).

SEVESO Directive Information

This product does not contain substances identified in the SEVESO Directive.

| International inventories | |
|---------------------------|----------|
| TSCA 8(b) | Complies |
| DSL/NDSL | Complies |
| EINECS/ELINCS | Complies |
| ENCS | - |
| IECSC | Complies |
| KECL | - |
| PICCS | - |
| AICS | Complies |

International inventories legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances **IECSC** - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out

SECTION 16: Other information

Full text of H-Statements referred to under Sections 2 and 3

H300 - Fatal if swallowed H400 - Very toxic to aquatic life H410 - Very toxic to aquatic life with long lasting effects EUH032 - Contact with acids liberates very toxic gas

| Classification procedure: | Expert judgment and weight of evidence determination. |
|---------------------------|---|
| Issuing Date: | 2017-07-10 |
| Revision Date: | 2023-09-27 |
| Disclaimer | |

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