

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

Issuing Date: 2018-11-06

Version: 1

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

1.1. Product identifier

Product No 12959
Product name Cytochrome c (D18C7) Rabbit mAb (HRP Conjugate)

Reach registration number This substance/mixture contains only ingredients which have been registered, or are exempt from registration, according to Regulation (EC) No. 1907/2006.

Contains

| Chemical name | Index No. | CAS No. |
|------------------|------------|---------|
| glycerol (30-60) | Not Listed | 56-81-5 |

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

Identified uses For research use only

1.3. Details of the supplier of the safety data sheet

| Importer (Applicable in EU only) | Manufacturer |
|--|---|
| 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 www.cellsignal.com
E-mail Address info@cellsignal.eu

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 112

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]

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2.2. Label elements

Supplemental hazard statement(s)

EUH210 - Safety data sheet available on request

2.3. Other hazards

May produce an allergic reaction.

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

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 |

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 off immediately with soap and plenty of water removing all contaminated clothes and shoes. |
| Eye contact | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. |
| 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 | None. |

5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors.

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 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

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

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 | TWA 10 mg/m ³ | Ceiling / Peak: 400 mg/m ³ TWA: 200 mg/m ³ |
| Chemical name | Italy | Portugal | Netherlands | Finland | Denmark |
| glycerol | | TWA 10 mg/m ³ | | TWA 20 mg/m ³ | |
| 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 |

8.2. Exposure controls

Appropriate engineering controls

Showers, eyewash stations, and ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Safety glasses with side-shields

Skin protection

Hand protection Impervious gloves.

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Other
Respiratory protection Wear suitable protective clothing.
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 | Liquid |
| Appearance | Clear |
| Color | Colorless |
| Odor | No information available |
| Odor Threshold | No information available |

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|---|---------------|---------------------------|
| pH | 7.4 | @ 20 °C |
| Melting point/freezing point | | No information available |
| Initial boiling point and boiling range | | No information available |
| Flash point | | No information available. |
| Evaporation rate | | No information available |
| Flammability (solid, gas) | | No information available |
| Upper flammability limit | | No information available |
| Lower flammability limit | | No information available |
| Vapor pressure | | No information available |
| Vapor density | | No information available |
| Relative density | | No information available |
| Solubility | | No information available |
| Partition coefficient: n-octanol/water | | No information available |
| Autoignition temperature | | No information available |
| Decomposition temperature | | No information available. |
| Viscosity | | No information available |
| Explosive properties | | No information available |
| Oxidizing properties | | No information available |

9.2. Other information

| | |
|-------------------------------------|--------------------------|
| Softening point | No information available |
| Molecular Weight | No information available |
| Solubility in other solvents | No information available |
| VOC content | No information available |
| Liquid Density | 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

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Protect from light. Extremes of temperature and direct sunlight.

10.5. Incompatible materials

Strong oxidizing agents. Metals.

10.6. Hazardous decomposition products

Thermal decomposition can lead to release of irritating and toxic gases and vapors. Carbon oxides (COx). Nitrogen oxides (NOx).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

This material should only be handled by, or under the close supervision of, those properly qualified in the handling and use of potentially hazardous chemicals. It should be borne in mind that the toxicological and physiological properties of this compound is not well defined.

| Chemical name | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|---------------|---------------------|--------------------|-----------------------------------|
| glycerol | = 12600 mg/kg (Rat) | > 10 g/kg (Rabbit) | > 570 mg/m ³ (Rat) 1 h |

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. |
| Carcinogenic effects | 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. |
| Other information | No information available. |

SECTION 12: Ecological information

12.1. Toxicity

No information available.

| Chemical name | Toxicity to algae | Toxicity to fish | Toxicity to daphnia and other aquatic invertebrates |
|---------------|-------------------|--|---|
| glycerol | - | LC50 51 - 57 mL/L (Oncorhynchus mykiss) 96 h | EC50 500 mg/L (Daphnia magna) 24 h |

Unknown Aquatic Toxicity 0% of the mixture consists of components of unknown hazards to the aquatic environment.

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

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Bioaccumulation No information available.
Bioconcentration factor (BCF) No information available.

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

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

No information available.

12.6. 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 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not regulated

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

IATA

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

12959 Cytochrome c (D18C7) Rabbit mAb (HRP Conjugate)

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 | Complies |
| PICCS | Complies |
| 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

This substance/mixture does not meet the criteria for classification in accordance with Regulation (EC) No. 1272/2008

Classification procedure: Expert judgment and weight of evidence determination.

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Disclaimer

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