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

**Issuing Date:** 2017-07-10 **Revision Date:** 2023-10-03 **Version:** 2

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

### 1.1. Product identifier

**Product No** 4448

**Product name** AFP (D12C1) Rabbit mAb

**Contains**

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

**Manufacturer**
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]

### 2.2. Label elements

**Signal word**
None.

**Hazard statement(s)**
None.

**Precautionary statement(s)**
None.

**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 nature** Mixture

| 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)<br>Aquatic Acute 1 (H400)<br>Aquatic Chronic 1 (H410)<br>(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/m³<br>TWA 10 mg/m³ | TWA 10 mg/m³ | TWA 10 mg/m³ | Ceiling / Peak: 400 mg/m³<br>TWA: 200 mg/m³ |
| sodium azide | TWA 0.1 mg/m³ | STEL 0.3 mg/m³ | TWA 0.1 mg/m³ | TWA 0.1 mg/m³ | TWA: 0.2 mg/m³ |

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

### 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** 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** Liquid - Clear
**Color** Colorless
**Odor** No information available

| Property | Values | Remarks • Method |
|---|---|---|
| **pH** | 7.5 | @ 20 °C |
| **Melting point/freezing point** | No information available | No information available |
| **Boiling point or initial boiling point and boiling range** | No information available | No information available |
| **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 explosive limits** | No information available | No information available |
| **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** | No information available | No information available. |
| **Viscosity** | No information available | No information available |
| **Explosive properties** | No information available | No information available |
| **Oxidizing properties** | No information available | 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**

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/m$^3$ ( 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 mykiss) 96 h | EC50 500 mg/L (Daphnia magna) 24 h |
| sodium azide | EC50 0.35 mg/L (Pseudokirchneriella subcapitata) 96 h | LC50 0.8 mg/L (Oncorhynchus mykiss) 96 h LC50 5.46 mg/L (Pimephales promelas) 96 h LC50 0.7 mg/L (Lepomis macrochirus) 96 h | LC100 1 mg/L (Orconectes rusticus) 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 according to IMO instruments** | Not regulated |

**ADR/RID**

| | |
|---|---|
| **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**

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:** | 2023-10-03 |

**Disclaimer**

**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.**