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

1.1. Product identifier

Product No 8112
Product name SignalStain® Antibody Diluent
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

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Index No.</th>
<th>CAS No</th>
</tr>
</thead>
<tbody>
<tr>
<td>sodium azide (&lt;0.1)</td>
<td>011-004-00-7</td>
<td>26628-22-8</td>
</tr>
</tbody>
</table>

Other means of identification 8112L, 8112S

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 Not for use in humans.

1.3. Details of the supplier of the safety data sheet

Importer (Applicable in EU only) Cell Signaling Technology Europe B.V.
Schuttersveld 2
2316 ZA Leiden
The Netherlands
TEL: +31 (0)71 7200 200
FAX: +31 (0)71 891 0098
Website www.cellsignal.com
E-mail Address info@cellsignal.eu

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

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

2.3. Other hazards
SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature
Aqueous buffer solution.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight %</th>
<th>EC No</th>
<th>Classification (1272/2008)</th>
<th>REACH Registration Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>sodium azide</td>
<td>26628-22-8</td>
<td>&lt;0.1</td>
<td>247-852-1</td>
<td>Acute Tox. 2 (H300) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) (EUH032)</td>
<td>no data available</td>
</tr>
</tbody>
</table>

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
If swallowed, do not induce vomiting - seek medical advice.

4.2 Most important symptoms and effects, both acute and delayed

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

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
8112 SignalStain® Antibody Diluent

For non-emergency personnel: Evacuate personnel to safe areas. Ensure adequate ventilation.
For emergency responders: Use personal protection recommended in Section 8.

6.2. Environmental precautions

Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low 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: Take up mechanically, placing in appropriate containers for disposal.

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.

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

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Occupational exposure limit values</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>European Union</td>
</tr>
<tr>
<td>sodium azide</td>
<td>TWA 0.1 mg/m³</td>
</tr>
<tr>
<td></td>
<td>P⁺</td>
</tr>
<tr>
<td>sodium azide</td>
<td>TWA 0.1 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Ceiling 0.29 mg/m³</td>
</tr>
<tr>
<td>sodium azide</td>
<td>TWA 0.2 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Skin</td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Appropriate engineering controls
Shower, 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.
Other: Wear suitable protective clothing.
Respiratory protection
In case of inadequate ventilation wear respiratory protection.

Environmental Exposure Controls
No information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>Clear</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>Light yellow</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>7.4</td>
<td>@ 20 °C</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flash point</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Upper flammability limit</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Lower flammability limit</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Vapor density</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Relative density</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Solubility</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Viscosity</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Softening point</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Molecular Weight</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>VOC content</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Density</td>
<td>No information available</td>
<td></td>
</tr>
</tbody>
</table>

9.2. Other information

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

None known based on information supplied.
10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

None under normal use conditions.

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.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>LD50 Oral (mg/kg)</th>
<th>LD50 Dermal (mg/kg)</th>
<th>LC50 Inhalation (mg/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>sodium azide</td>
<td>27 (Rat)</td>
<td>20 (Rabbit)</td>
<td>50 (Rat)</td>
</tr>
</tbody>
</table>

Information on likely routes of exposure

- **Inhalation**: There is no data available for this product.
- **Eye contact**: There is no data available for this product.
- **Skin contact**: There is no data available for this product.
- **Ingestion**: There is no data available for this product.

- **Symptoms**: No information available.
- **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.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Toxicity to algae</th>
<th>Toxicity to fish</th>
<th>Toxicity to daphnia and other aquatic invertebrates</th>
</tr>
</thead>
<tbody>
<tr>
<td>sodium azide</td>
<td>EC50 0.35 mg/L (Pseudokirchneriella subcapitata) 96 h</td>
<td>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</td>
<td>LC100 1 mg/L (Orconectes rusticus) 96 h</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability

Product is biodegradable.

12.3. Bioaccumulative potential

- **Bioaccumulation**: Not likely to bioaccumulate.
- **Bioconcentration factor (BCF)**: No information available.
12.4. Mobility in soil

Mobile.

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**: Not regulated
- **14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

**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

<table>
<thead>
<tr>
<th>Inventory</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSCA 8(b)</td>
<td>Complies</td>
</tr>
<tr>
<td>DSL/NDSL</td>
<td>Complies</td>
</tr>
<tr>
<td>EINECS/ELINCS</td>
<td>Complies</td>
</tr>
<tr>
<td>ENCS</td>
<td></td>
</tr>
<tr>
<td>IECSC</td>
<td>Complies</td>
</tr>
<tr>
<td>KECL</td>
<td></td>
</tr>
<tr>
<td>PICCS</td>
<td>Complies</td>
</tr>
<tr>
<td>AICS</td>
<td>Complies</td>
</tr>
</tbody>
</table>

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.
Issuing Date: 2017-11-02

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.