

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

Issuing Date: 2017-08-20

Revision Date: 2024-01-22

Version: 5

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

1.1. Product identifier

Product No 14209
Product name DNA Purification Buffers and Spin Columns (ChIP, CUT&RUN, CUT&Tag)
Kit Component 10007: DNA Binding Buffer
10008: DNA Wash Buffer
10009: DNA Elution Buffer
10010: DNA Purification Columns and Collection Tubes

Hazardous Components 10007: DNA Binding Buffer

Contains

| Chemical name | Index No. | CAS No |
|---------------------------------|--------------|---------|
| propan-2-ol (50 - 60%) | 603-117-00-0 | 67-63-0 |
| guanidinium chloride (50 - 60%) | 607-148-00-0 | 50-01-1 |

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 | 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

| | |
|--|---------------------|
| Acute oral toxicity | Category 4 - (H302) |
| Skin corrosion/irritation | Category 2 - (H315) |
| Serious eye damage/eye irritation | Category 2 - (H319) |
| Specific target organ toxicity - single exposure (STOT SE) | Category 3 - (H336) |
| Flammable liquids | Category 2 - (H225) |

2.2. Label elements



Signal word

Danger.

Hazard statement(s)

H302 - Harmful if swallowed.
H315 - Causes skin irritation.
H319 - Causes serious eye irritation.
H225 - Highly flammable liquid and vapor.
H336 - May cause drowsiness or dizziness.

Precautionary statement(s)

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P233 - Keep container tightly closed.
P240 - Ground/Bond container and receiving equipment.
P241 - Use explosion-proof electrical/ ventilating/ lighting/ equipment.
P242 - Use only non-sparking tools.
P243 - Take precautionary measures against static discharge.
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.
P264 - Wash face, hands and any exposed skin thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P271 - Use only outdoors or in a well-ventilated area.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P303 + P361 + P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a POISON CENTER or doctor/physician.
P330 - Rinse mouth.
P332 + P313 - If skin irritation occurs: Get medical advice/attention.
P337 + P313 - If eye irritation persists: Get medical advice/attention.
P362 + P364 - Take off contaminated clothing and wash it before reuse.
P370 + P378 - In case of fire: Use CO₂, dry chemical, or foam to extinguish.
P403 + P235 - Store in a well-ventilated place. Keep cool.
P405 - Store locked up.
P501 - Dispose of contents/container to an approved waste disposal plant.

14209 DNA Purification Buffers and Spin Columns (ChIP, CUT&RUN, CUT&Tag)

2.3. Other hazards

0 % of the mixture consists of ingredient(s) of unknown acute toxicity.

10007: DNA Binding Buffer - Reacts vigorously with bleach and releases toxic gas.

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

SECTION 3. Composition/information on ingredients

Kit Component **10007: DNA Binding Buffer**

DANGER: Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness. Highly flammable liquid and vapor.

| Chemical name | CAS No | Weight-% | EC No | Classification (1272/2008) | REACH Registration Number |
|----------------------|---------|----------|-----------|--|---------------------------|
| guanidinium chloride | 50-01-1 | 30-60 | 200-002-3 | Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) | no data available |
| propan-2-ol | 67-63-0 | 30-60 | 200-661-7 | Eye Irrit. 2 (H319) STOT SE 3 (H336) Flam. Liq. 2 (H225) | no data available |

NOTE: Reacts vigorously with bleach and releases toxic gas

Kit Component **10008: DNA Wash Buffer** **10009: DNA Elution Buffer** **10010: DNA Purification Columns and Collection Tubes**

These products do not contain substances at concentrations requiring disclosure under (EC) No. 1907/2006 (REACH).

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. Show this safety data sheet to the doctor in attendance. |
| Inhalation | IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention immediately if symptoms occur. |
| Skin contact | Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. If skin irritation occurs, get medical advice/attention. |
| Eye contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention immediately if symptoms occur. |
| Ingestion | Do NOT induce vomiting. Clean mouth with water and afterwards drink plenty of water. Get medical attention immediately if symptoms occur. |

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

Irritating to eyes and skin. Liquid, aerosols and vapors of this product are irritating and can cause pain, tearing, reddening and swelling accompanied by a stinging sensation and/or a feeling like that of fine dust in the eyes. Vapors may cause drowsiness and dizziness.

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 Carbon dioxide (CO₂). Dry powder. Foam.
Unsuitable Extinguishing Media No information available.

5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of toxic and corrosive gases/vapors. In the event of fire and/or explosion do not breathe fumes.

Hazardous Combustion Products Carbon oxides (CO_x). Nitrogen oxides (NO_x). Hydrogen chloride.

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 ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Avoid contact with skin, eyes and clothing. Evacuate personnel to safe areas. Use personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not allow material to contaminate ground water system. Local authorities should be advised if significant spillages cannot be contained.

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 Cover liquid spill with sand, earth or other noncombustible absorbent material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly. Prevent product from entering drains.

6.4. Reference to other sections

See Sections 8 & 13 for additional information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Ensure adequate ventilation. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use. Wear personal protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool 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 |
|---------------|--|---|--|---|---|
| propan-2-ol | | STEL 500 ppm STEL 1250 mg/m ³ TWA 400 ppm TWA 999 mg/m ³ | STEL 400 ppm STEL 980 mg/m ³ | TWA 200 ppm TWA 500 mg/m ³ STEL 400 ppm STEL 1000 mg/m ³ | TWA: 200 ppm TWA: 500 mg/m ³ Ceiling / Peak: 400 ppm Ceiling / Peak: 1000 mg/m ³ |
| Chemical name | Italy | Portugal | Netherlands | Finland | Denmark |
| propan-2-ol | | TWA 200 ppm STEL 400 ppm C(A4) | | TWA 200 ppm TWA 500 mg/m ³ STEL 250 ppm STEL 620 mg/m ³ | TWA 200 ppm TWA 490 mg/m ³ |
| Chemical name | Austria | Switzerland | Poland | Norway | Ireland |
| propan-2-ol | STEL 800 ppm STEL 2000 mg/m ³ TWA 200 ppm TWA 500 mg/m ³ C | SS-C** TWA 200 ppm TWA 500 mg/m ³ STEL 400 ppm STEL 1000 mg/m ³ | TWA 900 mg/m ³ STEL 1200 mg/m ³ | TWA 100 ppm TWA 245 mg/m ³ STEL 150 ppm STEL 306.25 mg/m ³ | TWA 200 ppm STEL 400 ppm Skin |

| Chemical name | European Union | United Kingdom | France | Spain | Germany |
|---------------|----------------|----------------|--------|--------|---|
| propan-2-ol | | | | 40 | Biologische Grenzwerte nach TRGS 903 sind zu beachten |
| Chemical name | Austria | Switzerland | Poland | Norway | Ireland |
| propan-2-ol | | 25 | | | |

8.2. Exposure controls

Appropriate engineering controls

Showers, eyewash stations, and ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection

Tightly fitting safety goggles.

Skin protection

Wear protective gloves and protective clothing

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

Information on the known physical chemical properties of each component within Kit are given below. If not included, information is either not available or not applicable. Refer to individual kit component SDS for further information.

| Kit Component | 10007: DNA Binding Buffer |
|------------------------------|----------------------------------|
| Physical state | Liquid |
| Appearance | Clear |
| Color | Colorless |
| Odor | Alcohol-like odor |
| pH | 7.0 (20 °C) |
| Flash point | 12°C (Isopropanol) |
| Autoignition temp (°C) VALUE | 425 |
| Upper flammability limit | 12% |
| Lower flammability limit | 2% |

| Kit Component | 10008: DNA Wash Buffer |
|----------------------|-------------------------------|
| Physical state | Liquid |
| Appearance | Clear |
| Color | Colorless |
| pH | 7.7 |

| Kit Component | 10009: DNA Elution Buffer |
|----------------------|----------------------------------|
| Physical state | Liquid |
| Appearance | Clear |
| Color | Colorless |
| pH | 8.5 |

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 | Reacts vigorously with bleach and releases toxic gas. |

10.4. Conditions to avoid

Extremes of temperature and direct sunlight. Heat, flames and sparks.

10.5. Incompatible materials

Skin and Eye Corrosion/Irritation

| | |
|-----------------------------------|----------------------------------|
| Kit Component | 10007: DNA Binding Buffer |
| Serious eye damage/eye irritation | Causes serious eye irritation. |
| Skin corrosion/irritation | Causes skin irritation |

Sensitization No information available

Mutagenic effects No information available.

Carcinogenic effects No information available

Reproductive toxicity No information available.

Systemic Target Organ Toxicity (STOT)

| | |
|------------------------|-----------------------------------|
| Kit Component | 10007: DNA Binding Buffer |
| STOT - single exposure | May cause drowsiness or dizziness |
| Target Organ Effects | Central nervous system (CNS) |

Aspiration Hazard No information available.

11.2. Information on other hazards

Other adverse effects No information available.

SECTION 12: Ecological information

12.1. Toxicity

Product Information No information available

Component Information

| Chemical name | Toxicity to algae | Toxicity to fish | Toxicity to daphnia and other aquatic invertebrates |
|----------------------|---|---|---|
| propan-2-ol | EC50 1000 mg/L (Desmodesmus subspicatus) 96 h EC50 1000 mg/L (Desmodesmus subspicatus) 72 h | LC50 9640 mg/L (Pimephales promelas) 96 h LC50 1400000 µg/L (Lepomis macrochirus) 96 h LC50 11130 mg/L (Pimephales promelas) 96 h | EC50 13299 mg/L (Daphnia magna) 48 h |
| guanidinium chloride | - | LC50 1758 mg/L (Leuciscus idus) 48 h | - |

12.2. Persistence and degradability

| | |
|-------------------------------|----------------------------------|
| Kit Component | 10007: DNA Binding Buffer |
| Persistence and degradability | Readily biodegradable |

12.3. Bioaccumulative potential

Kit Component
Bioaccumulation

10007: DNA Binding Buffer
Not likely to bioaccumulate

| Chemical name | Octanol-Water Partition Coefficient |
|----------------------|-------------------------------------|
| propan-2-ol | 0.05 |
| guanidinium chloride | -1.7 |

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

This material is subject to regulation as a hazardous material for shipping:

IMDG/IMO

14.1 UN number UN1219

14.2 UN proper shipping name Isopropanol

14.3 Transport hazard class(es) 3

14.4 Packing group II

14.5 Environmental hazards None

14.6 Special precautions for user

14.7 Maritime transport in bulk according to IMO instruments Not regulated

ADR/RID

14.1 UN number UN1219

14.2 UN proper shipping name Isopropanol

14.3 Transport hazard class(es) 3

14.4 Packing group II

14.5 Environmental hazards None

14.6 Special precautions for user

IATA

| | |
|-----------------------------------|-------------|
| 14.1 UN number | UN1219 |
| 14.2 UN proper shipping name | Isopropanol |
| 14.3 Transport hazard class(es) | 3 |
| 14.4 Packing group | II |
| 14.5 Environmental hazards | None |
| 14.6 Special precautions for user | |
| Excepted Quantity | E2 |

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) | - |
| DSL/NDSL | - |
| EINECS/ELINCS | - |
| ENCS | - |
| IECSC | - |
| KECL | - |
| PICCS | - |
| AICS | - |

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

- H302 - Harmful if swallowed
- H315 - Causes skin irritation
- H319 - Causes serious eye irritation
- H336 - May cause drowsiness or dizziness
- H225 - Highly flammable liquid and vapor

Classification procedure: Expert judgment and weight of evidence determination.
Issuing Date: 2017-08-20

Revision Date: 2024-01-22

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.