

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

Issuing Date: 2017-08-20

Version: 1

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

### 1.1. Product identifier

<b>Product No</b>	14231
<b>Product name</b>	SimpleChIP® Chromatin IP Buffers
<b>Kit Component</b>	<b>ChIP Buffer (10X)</b> <b>ChIP Elution Buffer (2X)</b> <b>5 M NaCl</b>
<b>Reach registration number</b>	This substance/mixture contains only ingredients which have been registered, or are exempt from registration, according to Regulation (EC) No. 1907/2006.

### Contains

<b>Chemical Name</b>	<b>Index No.</b>	<b>CAS No</b>
polyethylene glycol	Not Listed	9002-93-1
p-(1,1,3,3-tetramethylbutyl)phenylether (10 - 20%)		
trometamol (0 - 10%)	Not Listed	77-86-1
sodium dodecyl sulphate (0 - 10%)	Not Listed	151-21-3
glycine,	Not Listed	6381-92-6
N,N'-1,2-ethanediybis[N-(carboxymethyl)-, sodium salt, hydrate (1:2:2) (0 - 10%)		
sodium	Not Listed	302-95-4
3-alpha,12-alphadihydroxy-5beta-cholan-24-oate (0 - 10%)		
hydrochloric acid (0 - 10%)	017-002-01-X	7647-01-0

### 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

<b>Importer (Applicable in EU only)</b>	<b>Manufacturer</b>
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	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](http://www.cellsignal.com)  
**E-mail Address** [info@cellsignal.eu](mailto: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

Classification and label elements described below are inclusive of all hazards of the combined kit. The most severe classifications are listed for each endpoint. Refer to individual kit component SDS for classification and label elements for each component present in the kit.

<b>Skin corrosion/irritation</b>	Category 2 - (H315)
<b>Serious eye damage/eye irritation</b>	Category 1 - (H318)
<b>Chronic aquatic toxicity</b>	Category 3 - (H412)

### 2.2. Label elements



**Signal word**  
Danger

#### Hazard statement(s)

H315 - Causes skin irritation

H318 - Causes serious eye damage

H412 - Harmful to aquatic life with long lasting effects

#### Precautionary statement(s)

P321 - Specific treatment (see supplemental first aid instructions on this label)

P280 - Wear protective gloves/protective clothing/eye protection/face protection

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

### 2.3. Other hazards

None under normal use conditions.

## SECTION 3. Composition/information on ingredients

Kit Component Name	ChIP Buffer (10X)				
Chemical Name	CAS No	Weight %	EC No	Classification (1272/2008)	REACH Registration Number
polyethylene glycol p-(1,1,3,3-tetramethylbutyl)phenylether	9002-93-1	5-10	618-344-0	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Aquatic Chronic 2 (H411)	no data available
trometamol	77-86-1	3-7	201-064-4	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) STOT SE 3 (H335)	no data available
glycine, N,N'-1,2-ethanediybis[N-(carboxymethyl)-, sodium salt, hydrate (1:2:2)	6381-92-6	1-5	-	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) STOT SE 3 (H335)	no data available
sodium	302-95-4	0.1-1	206-132-7	Acute Tox. 4 (H302)	no data available

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3-alpha,12-epidihydroxy-5beta-cholan-24-oate				STOT SE 3 (H335)	
sodium dodecyl sulphate	151-21-3	0.1-1	205-788-1	STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Acute Tox. 4 (H302) Acute Tox. 3 (H311)	no data available
hydrochloric acid	7647-01-0	0.1-1	231-595-7	Skin Corr. 1B (H314) STOT SE 3 (H335)	no data available

### Kit Component Name CHIP Elution Buffer (2X)

Chemical Name	CAS No	Weight %	EC No	Classification (1272/2008)	REACH Registration Number
sodium dodecyl sulphate	151-21-3	1-5	205-788-1	STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Acute Tox. 4 (H302) Acute Tox. 3 (H311)	no data available
trometamol	77-86-1	1-5	201-064-4	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) STOT SE 3 (H335)	no data available
hydrochloric acid	7647-01-0	0.1-1	231-595-7	Acute Tox. 3 (H331) Skin Corr. 1A (H314) Skin Corr. 1B (H314) STOT SE 3 (H335) Press. Gas	no data available

### Kit Component Name 5M NaCl

This product does 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

<b>General advice</b>	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.
<b>Inhalation</b>	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention immediately if symptoms occur.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. If skin irritation occurs, get medical advice/attention.
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention immediately if symptoms occur.
<b>Ingestion</b>	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

Contains kit components which may cause the following effects, refer to individual component SDSs for full information on symptoms:

, Corrosive to the eyes and may cause irreversible eye damage. Causes skin irritation.

### 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

<b>Suitable Extinguishing Media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
<b>Unsuitable Extinguishing Media</b>	CAUTION: Use of water spray when fighting fire may be inefficient. Do not use a solid water stream as it may scatter and spread fire.

### 5.2. Special hazards arising from the substance or mixture

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

### 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

<b>For non-emergency personnel</b>	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.
<b>For emergency responders</b>	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

<b>Methods for containment</b>	Prevent further leakage or spillage if safe to do so.
<b>Methods for cleaning up</b>	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

Use according to package label instructions. Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use. Wear personal protective equipment. Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Keep away from food, drink and animal feeding stuffs. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Provide regular cleaning of equipment, work area and clothing. Wash hands before breaks and immediately after handling the product.

### 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
hydrochloric acid	TWA 5 ppm TWA 8 mg/m <sup>3</sup> STEL 10 ppm STEL 15 mg/m <sup>3</sup>	STEL 5 ppm STEL 8 mg/m <sup>3</sup> TWA 1 ppm TWA 2 mg/m <sup>3</sup>	STEL 5 ppm STEL 7.6 mg/m <sup>3</sup>	TWA 5 ppm TWA 7.6 mg/m <sup>3</sup> STEL 10 ppm STEL 15 mg/m <sup>3</sup>	TWA: 2 ppm TWA: 3 mg/m <sup>3</sup> Ceiling / Peak: 4 ppm Ceiling / Peak: 6 mg/m <sup>3</sup>  TWA: 3.0 mg/m <sup>3</sup>
Chemical Name	Italy	Portugal	Netherlands	Finland	Denmark
hydrochloric acid	TWA 5 ppm TWA 8 mg/m <sup>3</sup> STEL 10 ppm STEL 15 mg/m <sup>3</sup>	Ceiling 2 ppm C(A4)	STEL 15 mg/m <sup>3</sup> TWA 8 mg/m <sup>3</sup>	STEL 5 ppm STEL 7.6 mg/m <sup>3</sup>	Ceiling 5 ppm Ceiling 8 mg/m <sup>3</sup>
Chemical Name	Austria	Switzerland	Poland	Norway	Ireland
hydrochloric acid	STEL 10 ppm STEL 15 mg/m <sup>3</sup> TWA 5 ppm TWA 8 mg/m <sup>3</sup>	SS-C** TWA 2 ppm TWA 3.0 mg/m <sup>3</sup> STEL 4 ppm STEL 6 mg/m <sup>3</sup>	TWA 5 mg/m <sup>3</sup> STEL 10 mg/m <sup>3</sup>	Ceiling 5 ppm Ceiling 7 mg/m <sup>3</sup>	TWA 5 ppm TWA 8 mg/m <sup>3</sup> STEL 10 ppm STEL 15 mg/m <sup>3</sup>

**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**

**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	ChIP Buffer (10X)
Physical state	Liquid
Appearance	Translucent
Color	Clear
pH VALUE	8.1
Remarks	@ 20 °C
Kit Component	ChIP Elution Buffer (2X)
Physical state	Liquid
Appearance	Translucent
Color	Clear
pH VALUE	7.5
Remarks	@ 20 °C
Kit Component	5 M NaCl

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Physical state	Liquid
Appearance	Translucent
Color	Clear Colorless
pH VALUE	5.35
Remarks	@ 20 °C

### 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

<b>Hazardous polymerization</b>	Hazardous polymerization does not occur.
<b>Hazardous reactions</b>	None under normal processing.

#### 10.4. Conditions to avoid

Extremes of temperature and direct sunlight.

#### 10.5. Incompatible materials

Strong acids. Strong bases. Oxidizing agents.

#### 10.6. Hazardous decomposition products

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

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

##### Product Information

Refer to kit component SDS for full toxicological information. 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.

##### Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
polyethylene glycol p-(1,1,3,3-tetramethylbutyl)phenylet her	= 1800 mg/kg ( Rat )	= 8000 mg/kg ( Rabbit )	-
trometamol	5900 mg/kg ( Rat )	-	-
sodium dodecyl sulphate	= 1288 mg/kg (Rat)	= 580 mg/kg ( Rabbit )	> 3900 mg/m <sup>3</sup> ( Rat ) 1 h
glycine, N,N'-1,2-ethanediylbis[N-(carboxym ethyl)-, sodium salt, hydrate (1:2:2)	2800 mg/kg ( Rat )	-	-
sodium 3-alpha,12-alphadihydroxy-5beta-ch olan-24-oate	1370 mg/kg (Rat)	-	-

#### Information on likely routes of exposure

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**Inhalation** May cause irritation of respiratory tract

**Eye contact**

Kit Component ChIP Elution Buffer (2X)  
Eye contact Expected to be an irritant based on components

Kit Component ChIP Buffer (10X)  
Eye contact May cause irreversible damage to eyes

**Skin contact**

Kit Component ChIP Buffer (10X)  
Skin contact Expected to be an irritant based on components

**Ingestion** Ingestion may cause irritation to mucous membranes Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Symptoms** Contains kit components which may cause the following effects, refer to individual component SDSs for full information on symptoms:  
Corrosive to the eyes and may cause irreversible eye damage. Causes skin irritation

**Skin and Eye Corrosion/Irritation**

Kit Component ChIP Buffer (10X)  
Skin corrosion/irritation Causes skin irritation  
Serious eye damage/eye irritation Risk of serious damage to eyes

Kit Component ChIP Elution Buffer (2X)  
Serious eye damage/eye irritation Causes serious eye 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)** No information available

**Aspiration Hazard** No information available.

## SECTION 12: Ecological information

### 12.1. Toxicity

**Product Information**

Kit Component ChIP Buffer (10X)  
Ecotoxicity Harmful to aquatic life with long lasting effects

**Component Information**

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## 14231 SimpleChIP® Chromatin IP Buffers

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
polyethylene glycol p-(1,1,3,3-tetramethylbutyl)phenylether	-	LC50 8.9 mg/l (Pimephales promelas) 96 h	EC50 26 mg/l (Daphnia) 48 h
trometamol	-	-	NOEC >100 mg/L (Selenastrum capricornutum) 96 h
sodium dodecyl sulphate	EC50 53 mg/L (Desmodesmus subspicatus) 72 h EC50 3.59 - 15.6 mg/L (Pseudokirchneriella subcapitata) 96 h EC50 117 mg/L (Pseudokirchneriella subcapitata) 96 h EC50 30 - 100 mg/L (Desmodesmus subspicatus) 96 h	LC50 8 - 12.5 mg/L (Pimephales promelas) 96 h LC50 1.31 mg/L (Cyprinus carpio) 96 h LC50 22.1 - 22.8 mg/L (Pimephales promelas) 96 h LC50 4.3 - 8.5 mg/L (Oncorhynchus mykiss) 96 h LC50 4.62 mg/L (Oncorhynchus mykiss) 96 h LC50 4.2 mg/L (Oncorhynchus mykiss) 96 h LC50 7.97 mg/L (Brachydanio rerio) 96 h LC50 9.9 - 20.1 mg/L (Brachydanio rerio) 96 h LC50 4.06 - 5.75 mg/L (Lepomis macrochirus) 96 h LC50 4.2 - 4.8 mg/L (Lepomis macrochirus) 96 h LC50 4.5 mg/L (Lepomis macrochirus) 96 h LC50 5.8 - 7.5 mg/L (Pimephales promelas) 96 h LC50 10.2 - 22.5 mg/L (Pimephales promelas) 96 h LC50 6.2 - 9.6 mg/L (Pimephales promelas) 96 h LC50 13.5 - 18.3 mg/L (Poecilia reticulata) 96 h LC50 10.8 - 16.6 mg/L (Poecilia reticulata) 96 h LC50 15 - 18.9 mg/L (Pimephales promelas) 96 h	EC50 1.8 mg/L (Daphnia magna) 48 h
hydrochloric acid	-	LC50 282 mg/L (Gambusia affinis) 96 h	-

### 12.2. Persistence and degradability

Kit Component	ChIP Buffer (10X)
Persistence and degradability	Not readily biodegradable

### 12.3. Bioaccumulative potential

No information available.

Chemical Name	Octanol-Water Partition Coefficient
sodium dodecyl sulphate	1.6

### 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

Chemical Name	EU - Endocrine Disruptors Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Japan - Endocrine Disruptor Information
polyethylene glycol p-(1,1,3,3-tetramethylbutyl)phenylether	Group III Chemical	-	-



**SECTION 13: Disposal considerations****13.1. Waste treatment methods**

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

**SECTION 14: Transport information****IMDG/IMO**

<b>14.1 UN number</b>	Not regulated
<b>14.2 UN proper shipping name</b>	Not regulated
<b>14.3 Transport hazard class(es)</b>	Not regulated
<b>14.4 Packing group</b>	Not regulated
<b>14.5 Environmental hazards</b>	None
<b>14.6 Special precautions for user</b>	None
<b>14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not regulated

**ADR/RID**

<b>14.1 UN number</b>	Not regulated
<b>14.2 UN proper shipping name</b>	Not regulated
<b>14.3 Transport hazard class(es)</b>	Not regulated
<b>14.4 Packing group</b>	Not regulated
<b>14.5 Environmental hazards</b>	None
<b>14.6 Special precautions for user</b>	None

**IATA**

<b>14.1 UN number</b>	Not regulated
<b>14.2 UN proper shipping name</b>	Not regulated
<b>14.3 Transport hazard class(es)</b>	Not regulated
<b>14.4 Packing group</b>	Not regulated
<b>14.5 Environmental hazards</b>	None
<b>14.6 Special precautions for user</b>	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**

Chemical Name	Candidate List of Substances of Very High Concern for Authorization Information
polyethylene glycol p-(1,1,3,3-tetramethylbutyl)phenylether (10 - 20%)	Listed as: 4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated [covering well-defined substances and UVCB substances, polymers and homologues]

**SEVESO Directive Information**

Chemical Name	96/82/EC - Qualifying Quantities
hydrochloric acid	25 tonne (Lower-tier)

**International inventories**

<b>TSCA 8(b)</b>	-
<b>DSL/NDSL</b>	Complies
<b>EINECS/ELINCS</b>	-
<b>ENCS</b>	-
<b>IECSC</b>	Complies
<b>KECL</b>	-
<b>PICCS</b>	-
<b>AICS</b>	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**

H335 - May cause respiratory irritation  
H315 - Causes skin irritation  
H318 - Causes serious eye damage  
H302 - Harmful if swallowed  
H311 - Toxic in contact with skin  
H319 - Causes serious eye irritation  
H331 - Toxic if inhaled  
H314 - Causes severe skin burns and eye damage  
H411 - Toxic to aquatic life with long lasting effects

**Classification procedure:** Expert judgment and weight of evidence determination.

**Issuing Date:** 2017-08-20

**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.