

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

Issuing Date: 2018-02-14

Revision Date: 2024-07-17

Version: 2

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

1.1. Product identifier

Product No 6883
Product name SignalFire ECL™ Reagent
Kit Component 46935: SignalFire™ ECL Reagent A
74709: SignalFire™ ECL Reagent B

Contains

Chemical name	Index No.	CAS No
trometamol (0 - 10%)	Not Listed	77-86-1
Ethylene glycol (0 - 10%)	603-027-00-1	107-21-1
sodium salt of weak mineral acid (0 - 10%)	TRADE SECRET	TRADE SECRET

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

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.

Supplemental hazard statement(s)

EUH210 - Safety data sheet available on request.

Precautionary statement(s)

None.

2.3. Other hazards

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

Causes mild skin irritation.

*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 46935: SignalFire™ ECL Reagent A**

Chemical name	CAS No	Weight-%	EC No	Classification (1272/2008)	REACH Registration Number
trometamol	77-86-1	1-3	201-064-4	-	no data available
Ethylene glycol	107-21-1	1-3	203-473-3	Acute Tox. 4 (H302)	no data available

Kit Component 74709: SignalFire™ ECL Reagent B

Chemical name	CAS No	Weight-%	EC No	Classification (1272/2008)	REACH Registration Number
sodium salt of weak mineral acid	TRADE SECRET	0.1-1	TRADE SECRET	Acute Tox. 4 (H302) Eye Irrit. 2 (H319) STOT SE 3 (H335)	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

If swallowed, do not induce vomiting - seek medical advice. Rinse mouth. Never give

anything by mouth to an unconscious person.

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

Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. May cause slight 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

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

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**

Occupational exposure limit values					
Chemical name	European Union	United Kingdom	France	Spain	Germany
Ethylene glycol	TWA 20 ppm TWA 52 mg/m ³ STEL 40 ppm STEL 104 mg/m ³ S*	STEL 40 ppm STEL 104 mg/m ³ STEL 30 mg/m ³ TWA 20 ppm TWA 52 mg/m ³ TWA 10 mg/m ³ Skin	TWA 20 ppm TWA 52 mg/m ³ STEL 40 ppm STEL 104 mg/m ³ P*	TWA 20 ppm TWA 52 mg/m ³ STEL 40 ppm STEL 104 mg/m ³ S*	TWA: 10 ppm TWA: 26 mg/m ³ Skin Ceiling / Peak: 20 ppm Ceiling / Peak: 52 mg/m ³ H*
Chemical name	Italy	Portugal	Netherlands	Finland	Denmark
Ethylene glycol	TWA 20 ppm TWA 52 mg/m ³ STEL 40 ppm STEL 104 mg/m ³ Pelle*	Ceiling 100 mg/m ³ C(A4)	Huid* STEL 104 mg/m ³ TWA 52 mg/m ³ TWA 10 mg/m ³	TWA 20 ppm TWA 50 mg/m ³ STEL 40 ppm STEL 100 mg/m ³ iho*	TWA 10 ppm TWA 26 mg/m ³ TWA 10 mg/m ³ H*
Chemical name	Austria	Switzerland	Poland	Norway	Ireland
Ethylene glycol	H* STEL 20 ppm STEL 52 mg/m ³ TWA 10 ppm TWA 26 mg/m ³	SS-C** H* TWA 10 ppm TWA 26 mg/m ³ STEL 20 ppm STEL 52 mg/m ³	TWA 15 mg/m ³ STEL 50 mg/m ³	TWA 10 mg/m ³ TWA 20 ppm TWA 52 mg/m ³ Ceiling 25 ppm S* STEL 104 mg/m ³ STEL 40 ppm	TWA 10 mg/m ³ TWA 20 ppm TWA 52 mg/m ³ STEL 40 ppm STEL 104 mg/m ³ 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

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 46935: SignalFire™ ECL Reagent A
 Physical state Liquid
 Appearance Clear
 Color Light pink
 pH 9.5 (20 °C)
 Solubility Soluble in water

Kit Component 74709: SignalFire™ ECL Reagent B
 Physical state Liquid
 Color Colorless
 pH 5 (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

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

Strong oxidizing agents, chromium trioxide, potassium permanganate, sodium peroxide.

10.6. Hazardous decomposition products

Thermal decomposition can lead to release of irritating gases and vapors

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Product 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
trometamol	5900 mg/kg (Rat)	-	-
sodium salt of weak mineral acid	1200 mg/kg (Rat)	-	-

Information on likely routes of exposure

<u>Inhalation</u>	There is no data available for this product.
<u>Eye contact</u>	There is no data available for this product.
<u>Skin contact</u>	There is no data available for this product.
<u>Ingestion</u>	There is no data available for this product.

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

Symptoms	Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. May cause slight irritation.
Skin and Eye Corrosion/Irritation	No information available
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.

11.2. Information on other hazards

Other adverse effects	No information available.
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SECTION 12: Ecological information**12.1. Toxicity**

Product Information	No information available
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Component Information

Chemical name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
trometamol	-	-	NOEC >100 mg/L (Selenastrum capricornutum) 96 h
Ethylene glycol	EC50 6500 - 13000 mg/L (Pseudokirchneriella subcapitata) 96 h	LC50 40761 mg/L (Oncorhynchus mykiss) 96 h LC50 27540 mg/L (Lepomis macrochirus) 96 h LC50 41000 mg/L (Oncorhynchus mykiss) 96 h LC50 14 - 18 mL/L (Oncorhynchus mykiss) 96 h LC50 40000 - 60000 mg/L (Pimephales promelas) 96 h LC50 16000 mg/L (Poecilia reticulata) 96 h	EC50 46300 mg/L (Daphnia magna) 48 h
sodium salt of weak mineral acid	-	-	EC50 6.98 - 10.68 mg/L (Ceriodaphnia dubia) 48h

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

Chemical name	Octanol-Water Partition Coefficient
Ethylene glycol	-1.93

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
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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

Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)

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
H335 - May cause respiratory irritation

Classification procedure: Expert judgment and weight of evidence determination.

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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.