

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

Issuing Date: 2018-12-12 Version: 1

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

#### 1.1. Product identifier

Product No 9092

Product name StemLight<sup>TM</sup> iPS Cell Reprogramming Antibody Kit

**Kit Component** 2840: Oct-4A (C30A3) Rabbit mAb

3579: Sox2 (D6D9) XP® Rabbit mAb 4903: Nanog (D73G4) XP® Rabbit mAb 3695: LIN28A (D84C11) XP® Rabbit mAb 5605: c-Myc (D84C12) Rabbit mAb

4038: KLF4 Antibody

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** 

 Chemical name
 Index No.
 CAS No.

 glycerol (>100%)
 Not Listed
 56-81-5

 sodium azide (0 - 10%)
 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

### 1.3. Details of the supplier of the safety data sheet

Importer (Applicable in EU only)

Manufacturer

Cell Signaling Technology Europe B.V. Cell Signaling Technology, Inc.

Dellaertweg 9b 3 Trask Lane
2316 WZ Leiden Danvers, MA 01923
The Netherlands United States

TEL: +31 (0)71 7200 200 TEL: +1 978 867 2300 FAX: +31 (0)71 891 0019 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**

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#### 2.1. Classification of the substance or mixture

## Regulation (EC) No. 1272/2008

This substance/mixture does not meet the criteria for classification in accordance with Regulation (EC) No. 1272/2008

#### 2.2. Label elements

### 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**

**Kit Component**The following kit components contain the ingredients listed in the table below:

2840: Oct-4A (C30A3) Rabbit mAb 3579: Sox2 (D6D9) XP® Rabbit mAb 4903: Nanog (D73G4) XP® Rabbit mAb 3695: LIN28A (D84C11) XP® Rabbit mAb 5605: c-Myc (D84C12) Rabbit mAb

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) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) (EUH032)	no data available

#### **Kit Component**

The following kit components contain the ingredients listed in the table below:

4038: KLF4 Antibody

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

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 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.

Eye contact Rinse thoroughly with plenty of water, also under the eyelids. Keep eye wide open while

rinsing. Get medical attention immediately if irritation persists.

Ingestion Clean mouth with water and afterwards drink plenty of water. Do NOT induce vomiting.

Never give anything by mouth to an unconscious person.

### 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

surrounding environment.

Unsuitable Extinguishing Media None.

#### 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 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

Wear personal protective equipment. See section 8. Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use. 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

Chemical name	European Union	United Kingdom	France	Spain	Germany
glycerol		STEL 30 mg/m <sup>3</sup> TWA 10 mg/m <sup>3</sup>	TWA 10 mg/m <sup>3</sup>	TWA 10 mg/m <sup>3</sup>	Ceiling / Peak: 400 mg/m³
sodium azide	TWA 0.1 mg/m³ STEL 0.3 mg/m³ S*	STEL 0.3 mg/m³ TWA 0.1 mg/m³ Skin	TWA 0.1 mg/m³ STEL 0.3 mg/m³ P*	TWA 0.1 mg/m³ STEL 0.3 mg/m³ S*	TWA: 200 mg/m <sup>3</sup> TWA: 0.2 mg/m <sup>3</sup> Ceiling / Peak: 0.4 mg/m <sup>3</sup>
Chemical name	Italy	Portugal	Netherlands	Finland	Denmark
glycerol		TWA 10 mg/m <sup>3</sup>		TWA 20 mg/m <sup>3</sup>	
sodium azide	TWA 0.1 mg/m³ STEL 0.3 mg/m³ Pelle*	TWA 0.1 mg/m³ STEL 0.3 mg/m³ Ceiling 0.29 mg/m³ Ceiling 0.11 ppm C(A4) P*	Huid* STEL 0.3 mg/m³ TWA 0.1 mg/m³	TWA 0.1 mg/m³ STEL 0.3 mg/m³ iho*	TWA 0.1 mg/m³ H*
Chemical name	Austria	Switzerland	Poland	Norway	Ireland
glycerol		SS-C** TWA 50 mg/m³ STEL 100 mg/m³	TWA 10 mg/m <sup>3</sup>		TWA 10 mg/m³ STEL 30 mg/m³
sodium azide	H* STEL 0.3 mg/m³ TWA 0.1 mg/m³	TWA 0.2 mg/m <sup>3</sup> STEL 0.4 mg/m <sup>3</sup>	TWA 0.1 mg/m³ STEL 0.3 mg/m³	TWA 0.1 mg/m <sup>3</sup> STEL 0.1 mg/m <sup>3</sup>	TWA 0.1 mg/m³ STEL 0.3 mg/m³ 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

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 2840: Oct-4A (C30A3) Rabbit mAb

Physical state Liquid
Appearance Clear
Color Colorless
pH VALUE 7.5
Remarks @ 20 °C

Kit Component 3579: Sox2 (D6D9) XP® Rabbit mAb

Physical state Liquid
Appearance Clear
Color Colorless
pH VALUE 7.5
Remarks @ 20 °C

Kit Component 4903: Nanog (D73G4) XP® Rabbit mAb

Physical state Liquid
Appearance Clear
Color Colorless
pH VALUE 7.5
Remarks @ 20 °C

Kit Component 3695: LIN28A (D84C11) XP® Rabbit mAb

Physical state Liquid
Appearance Clear
Color Colorless
pH VALUE 7.5
Remarks @ 20 °C

Kit Component 5605: c-Myc (D84C12) Rabbit mAb

Physical state Liquid
Appearance Clear
Color Colorless
pH VALUE 7.5
Remarks @ 20 °C

Kit Component 4038: KLF4 Antibody

Physical state Liquid
Appearance Clear
Color Colorless
pH VALUE 7.5
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

Hazardous polymerization
Hazardous reactions
Hazardous polymerization does not occur.
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 toxicological effects

#### **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
glycerol	= 12600 mg/kg (Rat)	> 10 g/kg (Rabbit)	> 570 mg/m³ (Rat) 1 h
sodium azide	= 27 mg/kg (Rat)	= 20 mg/kg (Rabbit) = 50 mg/kg (	-
		Rat )	ļ

### Information on likely routes of exposure

Inhalation Avoid breathing vapors or mists May cause irritation of respiratory tract

Eye contact Avoid contact with eyes May cause slight irritation

**Skin contact** Avoid contact with skin

Ingestion 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** 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 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.

## **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
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glycerol	-	LC50 51 - 57 mL/L (Oncorhynchus	EC50 500 mg/L (Daphnia magna)
		mykiss) 96 h	24 h
sodium azide	EC50 0.35 mg/L	LC50 0.8 mg/L (Oncorhynchus	LC100 1 mg/L (Orconectes rusticus)
	(Pseudokirchneriella subcapitata)	mykiss) 96 h LC50 5.46 mg/L	96 h
	96 h	(Pimephales promelas) 96 h LC50	
		0.7 mg/L (Lepomis macrochirus) 96	
		h ,	

## 12.2. Persistence and degradability

No information available.

#### 12.3. Bioaccumulative potential

Chemical name	Octanol-Water Partition Coefficient
glycerol	-1.76

#### 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

# **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Waste from residues / unused

products

**Contaminated packaging** 

Other information

Dispose of in accordance with local regulations.

Empty containers should be taken to an approved waste handling site for recycling or

disposal.

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 Not regulated 14.2 UN proper shipping name 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 Transport in bulk according to Not regulated

Annex II of MARPOL 73/78 and the

**IBC Code** 

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

IATA

14.1UN numberNot regulated14.2UN proper shipping nameNot regulated14.3Transport hazard class(es)Not regulated14.4Packing groupNot regulated14.5Environmental hazardsNone14.6Special precautions for userNone

# **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** Complies

EINECS/ELINCS - ENCS -

IECSC Complies

IECSC Compi

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:** 2018-12-12

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.