Safety Data Sheet (SDS) According to the OSHA Hazard Communication Standard 29 CFR 1910.1200

Issuing Date: 2017-08-20 **Revision Date:** 2024-10-10 **Version:** 2

SECTION 1. Identification

Product identifier

Product No 14282

Product name SimpleChIP® Enzymatic Cell Lysis Buffers A & B

Kit Component 7006: Buffer A (4X)
7007: Buffer B (4X)

Hazardous Components
7006: Buffer A (4X)

UN number UN3316

Recommended use of the chemical and restrictions on use

Identified uses This product is intended for research purposes only.

Manufacturer, importer, supplier

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

Website www.cellsignal.com

Email address support@cellsignal.com

Emergency telephone number In case of emergency call CHEMTREC 1-800-424-9300

SECTION 2. Hazard(s) identification

Classification

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. This substance/mixture is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Serious eye damage/eye irritation	Category 1
Chronic aquatic toxicity	Category 3

GHS Label elements, including precautionary statements

Signal Word
Danger

Hazard statement(s)
Causes serious eye damage.
Harmful to aquatic life with long lasting effects.

Precautionary Statement(s)
Wear protective gloves/protective clothing/eye protection/face protection.
Avoid release to the environment.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a POISON CENTER or doctor/physician.
Dispose of contents/container to an approved waste disposal plant.

Supplementary Hazard Information
Toxic to aquatic life with long lasting effects.

Hazards not otherwise classified (HNOC)
Not applicable.

SECTION 3. Composition/information on ingredients

Kit Component **7006: Buffer A (4X)**

DANGER: Causes serious eye damage. Harmful to aquatic life with long lasting effects.

Chemical name	CAS No	Weight-%
2-[2-[4-(2,4,4-trimethylpentan-2-yl)phenoxy]ethoxy] ethanol	9036-19-5	1-5
sodium azide	26628-22-8	<0.1

Kit Component **7007: Buffer B (4X)**

Chemical name	CAS No	Weight-%
sodium azide	26628-22-8	<0.1

SECTION 4. First-aid measures

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If irritation persists, call a physician.

Skin contact Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. If skin irritation or rash occurs: Get medical advice/attention.

Inhalation IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.

Ingestion Do NOT induce vomiting. Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician.

Most important symptoms and effects, both acute and delayed

No information available.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

Advice for emergency responders

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.
Protection of first-aiders	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves

SECTION 5. Fire-fighting measures

Extinguishing media

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment
Unsuitable Extinguishing Media	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

Specific hazards arising from the chemical

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

Explosion Data

Sensitivity to Mechanical Impact	None
Sensitivity to Static Discharge	None

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	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.
Other information	No information available.

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.

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.

SECTION 7. Handling and storage

Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice. 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. Prevent splashing and leaking of product.

Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions	Keep containers tightly closed in a dry, cool and well-ventilated place.
Packaging material	No information available
Incompatible products	Strong acids, Strong bases, Oxidizing agents

SECTION 8. Exposure controls/personal protection

Control parameters

Occupational exposure limit values			
Chemical name	**ACGIH TLV**	**OSHA PEL**	**NIOSH REL**
sodium azide	Ceiling: 0.29 mg/m^3 Ceiling: 0.11 ppm	-	Ceiling: 0.1 ppm Ceiling: 0.3 mg/m^3

Appropriate engineering controls

Showers, eyewash stations, and ventilation systems.

Individual protection measures, such as personal protective equipment

Personal protective equipment (PPE) needs to be selected depending on the implemented engineering controls, frequency/duration of work activities and the concentrations of the hazardous substance.

Eye/face protection	Tightly fitting safety goggles.
Skin and body protection	Wear protective gloves/clothing.
Respiratory protection	In case of insufficient ventilation wear suitable respiratory equipment.
Hygiene measures	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.

SECTION 9. 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.

Information on basic physical and chemical properties

Kit Component	**7006: Buffer A (4X)**
Physical state	Liquid
Appearance	Clear
Color	Colorless

pH	7.5 (20 °C)

Kit Component	**7007: Buffer B (4X)**
Physical state	Liquid
Appearance	Clear
Color	Colorless
pH	7.5 (20 °C)

SECTION 10. Stability and reactivity

Reactivity

No information available.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

Hazardous reactions	None under normal processing.
Hazardous polymerization	None under normal processing.

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

Incompatible Materials

Strong acids, Strong bases, Oxidizing agents

Hazardous Decomposition Products

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

SECTION 11. Toxicological information

Information on likely routes of exposure

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.

Inhalation	May cause irritation of respiratory tract.
Eye contact	
Skin contact	Avoid contact with skin. Prolonged contact may cause redness and irritation.
Ingestion	Ingestion may cause irritation to mucous membranes. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Information on toxicological effects

Component Information

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
2-[2-[4-(2,4,4-trimethylpentan-2-yl)phenoxy]ethoxy]ethanol	1700 mg/kg (Rat)	-	-
sodium azide	= 27 mg/kg (Rat)	= 20 mg/kg (Rabbit) = 50 mg/kg (Rat)	-

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

Symptoms No information available.

Skin and Eye Corrosion/Irritation

Kit Component	**7006: Buffer A (4X)**
Serious eye damage/eye irritation	Risk of serious damage to eyes

Sensitization No information available

Mutagenic effects No information available

Carcinogenicity No component of this product present at levels greater than or equal to 0.1% is identifiable as probable, possible or confirmed carcinogen by IARC, ACGIH, NTP, or OSHA.

Reproductive toxicity No information available.

Systemic Target Organ Toxicity (STOT) No information available

Aspiration Hazard No information available.

SECTION 12. Ecological information

Ecotoxicity

Product Information

Kit Component	**7006: Buffer A (4X)**
Ecotoxicity	Toxic to aquatic life with long lasting effects

Component Information

Chemical name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
2-[2-[4-(2,4,4-trimethylpentan-2-yl)phenoxy]ethoxy]ethanol	EC50 0.21 mg/L (Selenastrum) 96 h	LC50 7.2 mg/L (Oncorhynchus mykiss) 96 h	LC50 8.6 mg/L (Daphnia magna) 48 h
sodium azide	EC50 0.35 mg/L (Pseudokirchneriella subcapitata) 96 h	LC50 0.8 mg/L (Oncorhynchus mykiss) 96 h LC50 0.7 mg/L (Lepomis macrochirus) 96 h LC50 5.46 mg/L (Pimephales promelas) 96 h	LC100 1 mg/L (Orconectes rusticus) 96 h

Persistence and degradability

Kit Component	**7006: Buffer A (4X)**
Persistence and degradability	Results show, that both long and short chain 4-tert-OPnEO are not readily biodegradable using standard test methods.

Kit Component	**7007: Buffer B (4X)**
Persistence and degradability	Product is biodegradable

Bioaccumulation

Kit Component	**7007: Buffer B (4X)**
Bioaccumulation	Not likely to bioaccumulate

Mobility No information available

Other adverse effects

No information available.

SECTION 13. Disposal considerations

Waste Disposal Methods

Dispose of in accordance with all applicable national environmental laws and regulations.

Disposal considerations

Do not empty into drains; dispose of this material and its container in a safe way. Dispose of wastes in an approved waste disposal facility.

SECTION 14. Transport information

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

DOT

UN number	UN3316
UN proper shipping name	Chemical Kit
Transport hazard class(es)	9
Packing group	III

IATA

UN number	UN3316
UN proper shipping name	Chemical Kit
Transport hazard class(es)	9
Packing group	III

SECTION 15. Regulatory information

North American Inventory Listing

Chemical name	TSCA 8(b)	TSCA 12(b)	DSL	NDSL
2-[2-[4-(2,4,4-trimethylpentan-2-yl)phenoxy]ethoxy]ethanol	Listed	Not Listed	Listed	Not Listed
sodium azide	Listed	Not Listed	Listed	Not Listed

SARA 313

Refer to kit component SDS for full SARA Section 313 reporting requirements.

Chemical name	CAS No	SARA 313 - Threshold Values %
hydrochloric acid	7647-01-0	1.0

sodium azide	26628-22-8	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

Refer to kit component SDS for full Clean Water Act (CWA) reporting requirements.

CERCLA

Refer to kit component SDS for full Comprehensive Environmental Response Compensation and Liability Act (CERCLA) reporting requirements.

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
sodium azide	1000 lb	1000 lb

California Proposition 65

Refer to kit component SDS for full California Proposition 65 information.

U.S. State Right-to-Know Regulations

Refer to kit component SDS for applicable State Right-To-Know (RTK) information.

Chemical name	New Jersey	Massachusetts	Pennsylvania
water	Not Listed	Not Listed	Listed
sucrose	Not Listed	Listed	Listed
hydrochloric acid	Listed	Listed	Listed
sodium azide	Listed	Listed	Listed

SECTION 16. Other information

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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.

End of Safety Data Sheet