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

Issuing Date: 2017-08-20 **Revision Date:** 2020-05-02 **Version:** 3

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

1.1. Product identifier

Product No 56383

Product name SimpleChIP® Plus Sonication Chromatin IP Kit

Kit Component

7005: Glycine Solution (10X)
96529: ChIP Sonication Cell Lysis Buffer (2X)
28778: ChIP Sonication Nuclear Lysis Buffer
7008: ChIP Buffer (10X)
7009: ChIP Elution Buffer (2X)
7010: 5 M NaCl
9006: ChIP-Grade Protein G Magnetic Beads
10007: DNA Binding Buffer
10008: DNA Wash Buffer
10009: DNA Elution Buffer
10010: DNA Purification Columns and Collection Tubes
7012: Protease Inhibitor Cocktail (200X)
7013: RNAse A (10 mg/ml)
10012: Proteinase K (20 mg/ml)
7014: SimpleChIP® Human RPL30 Exon 3 Primers
7015: SimpleChIP® Mouse RPL30 Intron 2 Primers
4620: Histone H3 (D2B12) XP® Rabbit mAb (ChIP Formulated)
2729: Normal Rabbit IgG

Contains

Chemical name	Index No.	CAS No
glycerol (>100%)	Not Listed	56-81-5
dimethyl sulfoxide (90 - 100%)	Not Listed	67-68-5
propan-2-ol (50 - 60%)	603-117-00-0	67-63-0
guanidinium chloride (50 - 60%)	607-148-00-0	50-01-1
trometamol (10 - 20%)	Not Listed	77-86-1
polyethylene glycol p-(1,1,3,3-tetramethylbutyl)phenylether (10 - 20%)	Not Listed	9002-93-1
sodium dodecyl sulphate (0 - 10%)	Not Listed	151-21-3
glycine, N,N'-1,2-ethanediylbis[N-(carboxymethyl)-, sodium salt, hydrate (1:2:2) (0 - 10%)	Not Listed	6381-92-6
Proteinase, Tritirachium album serine (0 - 10%)	Not Listed	39450-01-6
sodium 3-alpha,12-alphadihydroxy-5beta-cholan-24-oate (0 - 10%)	Not Listed	302-95-4
hydrochloric acid (0 - 10%)	017-002-01-X	7647-01-0
sodium	Not Listed	75277-39-3

4-(2-hydroxyethyl)piperazin-1-ylethanesulphonate (0 - 10%)
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
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

Manufacturer
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 1 - (H318)
Respiratory sensitization	Category 1 - (H334)
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
H318 - Causes serious eye damage
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335 - May cause respiratory irritation
H336 - May cause drowsiness or dizziness

H225 - Highly flammable liquid and vapor

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
P284 - In case of inadequate ventilation wear respiratory protection
P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
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
P308 + P313 - IF exposed or concerned: Get medical advice/attention
P330 - Rinse mouth
P332 + P313 - If skin irritation occurs: Get medical advice/attention
P337 + P313 - If eye irritation persists: Get medical advice/attention
P342 + P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician
P362 - Take off contaminated clothing and wash before reuse
P370 + P378 - In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed
P405 - Store locked up
P501 - Dispose of contents/container to an approved waste disposal plant

2.3. Other hazards

May accelerate skin absorption of other materials. Special attention needed when toxic materials are present in dimethyl sulfoxide because of enhanced skin absorption.

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 7005: Glycine Solution (10X)

Chemical name	CAS No	Weight-%	EC No	Classification (1272/2008)	REACH Registration Number
glycine	56-40-6	5-10	200-272-2	-	no data available

Kit Component 96529: ChIP Sonication Cell Lysis Buffer (2X)

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	1 - <3	-	Acute Tox. 4(H302) Eye Dam. 1(H318) Aquatic Chronic 2 (H411)	no data available

Kit Component 28778: ChIP Sonication Nuclear Lysis Buffer

Chemical name	CAS No	Weight-%	EC No	Classification (1272/2008)	REACH Registration Number
polyethylene glycol	9002-93-1	1-<3	-	Acute Tox. 4(H302) Eye Dam. 1(H318)	no data available

p-(1,1,3,3-tetramethylbutyl)phenylether				Aquatic Chronic 2 (H411)	

Kit Component 7008: 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	-	no data available
glycine, N,N'-1,2-ethanediylbis[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 3-alpha,12-alphadihydroxy-5beta-cholan-24-oate	302-95-4	0.1-1	206-132-7	Acute Tox. 4 (H302) STOT SE 3 (H335)	no data available
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 7009: 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	-	no data available

Kit Component 9006: ChIP-Grade Protein G Magnetic Beads

Chemical name	CAS No	Weight-%	EC No	Classification (1272/2008)	REACH Registration Number
sodium azide	26628-22-8	<=0.1	247-852-1	Acute Tox. 2 (H300) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) (EUH032)	no data available

Kit Component 10007: DNA Binding Buffer

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

Kit Component Name 7012: Protease Inhibitor Cocktail (200X)

Chemical name	CAS No	Weight-%	EC No	Classification	REACH

				(1272/2008)	Registration Number
dimethyl sulfoxide	67-68-5	60-100	200-664-3	-	no data available
benzenesulfonyl fluoride, 4-(2-aminoethyl)-, hydrochloride (1:1)	30827-99-7	1-5	608-547-2	Skin Corr. 1B (H314)	no data available

Kit Component Name 7013: RNAse A (10 mg/ml)

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
trometamol	77-86-1	7 - <10	201-064-4	-	no data available

Kit Component Name 10012: Proteinase K (20 mg/ml)

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
Proteinase, Tritirachium album serine	39450-01-6	1-5	254-457-8	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Resp. Sens. 1 (H334)	no data available

Kit Component 4620: Histone H3 (D2B12) XP® Rabbit mAb (ChIP Formulated)

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 Name 2729: Normal Rabbit IgG

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

Kit Component Name
7010: 5 M NaCl
10008: DNA Wash Buffer
10009: DNA Elution Buffer
10010: DNA Purification Columns and Collection
7014: SimpleChIP® Human RPL30 Exon 3 Primers
7015: SimpleChIP® Mouse RPL30 Intron 2 Primers

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. If breathing is difficult, give oxygen.

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.
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

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. 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. 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

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.

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

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. Ensure adequate ventilation.
For emergency responders	Use personal protection recommended in Section 8.

6.2. Environmental precautions

Should not be released into the environment. Prevent further leakage or spillage if safe to do so. 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

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. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges.

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
glycerol		STEL 30 mg/m³ TWA 10 mg/m³	TWA 10 mg/m³	TWA 10 mg/m³	Ceiling / Peak: 400 mg/m³ TWA: 200 mg/m³
dimethyl sulfoxide					TWA: 50 ppm TWA: 160 mg/m³ Skin Ceiling / Peak: 100 ppm Ceiling / Peak: 320 mg/m³ H*
propan-2-ol		STEL 500 ppm STEL 1250 mg/m³ TWA 400 ppm TWA 999 mg/m³	STEL 400 ppm STEL 980 mg/m³	TWA 200 ppm TWA 500 mg/m³ STEL 400 ppm STEL 1000 mg/m³	TWA: 200 ppm TWA: 500 mg/m³ Ceiling / Peak: 400 ppm Ceiling / Peak: 1000 mg/m³
hydrochloric acid	TWA 5 ppm TWA 8 mg/m³ STEL 10 ppm STEL 15 mg/m³	STEL 5 ppm STEL 8 mg/m³ TWA 1 ppm TWA 2 mg/m³	STEL 5 ppm STEL 7.6 mg/m³	TWA 5 ppm TWA 7.6 mg/m³ STEL 10 ppm STEL 15 mg/m³	TWA: 2 ppm TWA: 3 mg/m³ Ceiling / Peak: 4 ppm Ceiling / Peak: 6 mg/m³ TWA: 3.0 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: 0.2 mg/m³ Ceiling / Peak: 0.4 mg/m³
Chemical name	**Italy**	**Portugal**	**Netherlands**	**Finland**	**Denmark**
glycerol		TWA 10 mg/m³		TWA 20 mg/m³	
dimethyl sulfoxide				TWA 50 ppm iho*	TWA 50 ppm TWA 160 mg/m³
propan-2-ol		TWA 200 ppm STEL 400 ppm C(A4)		TWA 200 ppm TWA 500 mg/m³ STEL 250 ppm STEL 620 mg/m³	TWA 200 ppm TWA 490 mg/m³
hydrochloric acid	TWA 5 ppm TWA 8 mg/m³ STEL 10 ppm STEL 15 mg/m³	TWA 5 ppm TWA 8 mg/m³ STEL 10 ppm STEL 15 mg/m³ Ceiling 2 ppm	STEL 15 mg/m³ TWA 8 mg/m³	STEL 5 ppm STEL 7.6 mg/m³	Ceiling 5 ppm Ceiling 8 mg/m³

		C(A4)			
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/m³		TWA 10 mg/m³ STEL 30 mg/m³
dimethyl sulfoxide	H* TWA 50 ppm TWA 160 mg/m³	H* TWA 50 ppm TWA 160 mg/m³ STEL 100 ppm STEL 320 mg/m³			
propan-2-ol	STEL 800 ppm STEL 2000 mg/m³ TWA 200 ppm TWA 500 mg/m³ C	SS-C** TWA 200 ppm TWA 500 mg/m³ STEL 400 ppm STEL 1000 mg/m³	TWA 900 mg/m³ STEL 1200 mg/m³	TWA 100 ppm TWA 245 mg/m³ STEL 150 ppm STEL 306.25 mg/m³	TWA 200 ppm STEL 400 ppm Skin
hydrochloric acid	STEL 10 ppm STEL 15 mg/m³ TWA 5 ppm TWA 8 mg/m³	SS-C** TWA 2 ppm TWA 3 mg/m³ STEL 4 ppm STEL 6 mg/m³	TWA 5 mg/m³ STEL 10 mg/m³	Ceiling 5 ppm Ceiling 7 mg/m³	TWA 8 mg/m³ TWA 5 ppm STEL 10 ppm STEL 15 mg/m³
sodium azide	H* STEL 0.3 mg/m³ TWA 0.1 mg/m³	TWA 0.2 mg/m³ STEL 0.4 mg/m³	TWA 0.1 mg/m³ STEL 0.3 mg/m³	TWA 0.1 mg/m³ STEL 0.1 mg/m³	TWA 0.1 mg/m³ STEL 0.3 mg/m³ 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 If splashes are likely to occur, wear Face-shield

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	**7005: Glycine Solution (10X)**
Physical state	Liquid
Appearance	Transparent

Color	Clear Colorless
pH VALUE	6.58
Remarks	@ 20 °C

Kit Component	**96529: ChIP Sonication Cell Lysis Buffer (2X)**
Physical state	Liquid
Appearance	Clear
Color	Colorless
pH VALUE	8.5

Kit Component	**28778: ChIP Sonication Nuclear Lysis Buffer**
Physical state	Liquid
Appearance	Clear
Color	Colorless
pH VALUE	8.0

Kit Component	**7008: ChIP Buffer (10X)**
Physical state	Liquid
Appearance	Translucent
Color	Clear
pH VALUE	8.1
Remarks	@ 20 °C

Kit Component	**7009: ChIP Elution Buffer (2X)**
Physical state	Liquid
Appearance	Translucent
Color	Clear
pH VALUE	7.5
Remarks	@ 20 °C

Kit Component	**7010: 5M NaCl**
Physical state	Liquid
Appearance	Clear
Color	Colorless
pH VALUE	5.35
Remarks	@ 20 °C

Kit Component	**9006: ChIP-Grade Protein G Magnetic Beads**
Physical state	Liquid
Appearance	Suspension
Color	Clear with white suspended solids

Kit Component	**10007: DNA Binding Buffer**
Physical state	Liquid
Appearance	Clear
Color	Colorless
Odor	Characteristic
pH VALUE	7.0
Remarks	@ 20 °C
Flash point (°C) VALUE	>=21
Autoignition temp (°C) VALUE	425
Upper flammability limit	12%
Lower flammability limit	2%

Kit Component	**10008: DNA Wash Buffer**
Physical state	Liquid
pH VALUE	7.7
Remarks	@ 20 °C

Kit Component	**10009: DNA Elution Buffer**
Physical state	Liquid
pH VALUE	8.5
Remarks	@ 20 °C

Kit Component	**10010: DNA Purification Columns and Collection Tubes**
Physical state	Solid (1 X 36 Pack)

Kit Component	**7012: Protease Inhibitor Cocktail (200X)**
Physical state	Liquid
Appearance	Clear
Color	Colorless
Odor	Sulphurous
pH VALUE	7
Remarks	@ 20 °C
Flash point (°C) VALUE	87°C
Method	Closed cup (based on components)
Upper flammability limit	42%
Lower flammability limit	3.5%

Kit Component	**7013: RNAse A (10 mg/ml)**
Physical state	Liquid
Appearance	Clear
Color	Colorless
pH VALUE	7.6
Remarks	@ 20 °C

Kit Component	**10012: Proteinase K (20 mg/ml)**
Physical state	Liquid
Appearance	Clear
Color	Colorless

Kit Component	**7014: SimpleChIP® Human RPL30 Exon 3 Primers**
Physical state	Liquid
Appearance	Clear
Color	Colorless

Kit Component	**7015: SimpleChIP® Mouse RPL30 Intron 2 Primers**
Physical state	Liquid
Appearance	Clear
Color	Colorless

Kit Component	**4620: Histone H3 (D2B12) XP® Rabbit mAb (ChIP Formulated)**
Physical state	Liquid
Appearance	Clear
Color	Colorless
pH VALUE	7.5
Remarks	@ 20 °C

Kit Component	**2729: Normal Rabbit IgG**
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 polymerization does not occur.
Hazardous reactions None under normal processing.

10.4. Conditions to avoid

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

Kit Component **10007: DNA Binding Buffer**
ATEmix (oral) 867 mg/kg
ATEmix (dermal) 25600 mg/kg

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
dimethyl sulfoxide	= 14500 mg/kg (Rat) = 28300 mg/kg (Rat)	= 40 g/kg (Rat)	> 5.33 mg/L (Rat) 4 h
propan-2-ol	5000 mg/kg (Rat)	12800 mg/kg (Rabbit)	16000 ppm (Rat) 8h
guanidinium chloride	475 mg/kg (Rat)	-	-
trometamol	5900 mg/kg (Rat)	-	-
polyethylene glycol p-(1,1,3,3-tetramethylbutyl)phenylether	= 1800 mg/kg (Rat)	-	-
glycine	9550 mg/kg (Rat)	-	-
sodium dodecyl sulphate	= 1288 mg/kg (Rat)	= 200 mg/kg (Rabbit)	> 3900 mg/m³ (Rat) 1 h
glycine, N,N'-1,2-ethanediylbis[N-(carboxymethyl)-, sodium salt, hydrate (1:2:2)	2800 mg/kg (Rat)	-	-
benzenesulfonyl fluoride, 4-(2-aminoethyl)-, hydrochloride (1:1)	2834 mg/kg (mouse)	-	-
sodium 3-alpha,12-alphadihydroxy-5beta-cholan-24-oate	1370 mg/kg (Rat)	-	-
hydrochloric acid	238 - 277 mg/kg (Rat)	> 5010 mg/kg (Rabbit)	= 1.68 mg/L (Rat) 1 h
sodium azide	= 27 mg/kg (Rat)	= 20 mg/kg (Rabbit) = 50 mg/kg (Rat)	-

Information on likely routes of exposure

Inhalation

Kit Component	**10007: DNA Binding Buffer**
Inhalation	May cause drowsiness and dizziness
Kit Component	**10012: Proteinase K (20 mg/ml)**
Inhalation	May cause allergy or asthma symptoms or breathing difficulties if inhaled

Eye contact

Kit Component	**28778: ChIP Sonication Nuclear Lysis Buffer**
Eye contact	May cause irreversible damage to eyes Expected to be an irritant based on components
Kit Component	**96529: ChIP Sonication Cell Lysis Buffer (2X)**
Eye contact	Expected to be an irritant based on components
Kit Component	**7009: ChIP Elution Buffer (2X)**
Eye contact	Expected to be an irritant based on components
Kit Component	**10007: DNA Binding Buffer**
Eye contact	Expected to be an irritant based on components
Kit Component	**7012: Protease Inhibitor Cocktail (200X)**
Eye contact	Expected to be an irritant based on components
Kit Component	**7008: ChIP Buffer (10X)**
Eye contact	May cause irreversible damage to eyes

Skin contact

Kit Component	**7008: ChIP Buffer (10X)**
Skin contact	Expected to be an irritant based on components
Kit Component	**10007: DNA Binding Buffer**
Skin contact	Expected to be an irritant based on components
Kit Component	**7012: Protease Inhibitor Cocktail (200X)**
Skin contact	Expected to be an irritant based on components

Ingestion

Kit Component	**10007: DNA Binding Buffer**
Ingestion	Harmful if swallowed

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. 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. 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

Kit Component	**7008: ChIP Buffer (10X)**
Serious eye damage/eye irritation	Risk of serious damage to eyes
Skin corrosion/irritation	Causes skin irritation
Kit Component	**7009: ChIP Elution Buffer (2X)**
Serious eye damage/eye irritation	Causes serious eye irritation
Kit Component	**10007: DNA Binding Buffer**
Serious eye damage/eye irritation	Causes serious eye irritation
Skin corrosion/irritation	Causes skin irritation
Kit Component	**7012: Protease Inhibitor Cocktail (200X)**
Serious eye damage/eye irritation	Causes serious eye irritation
Skin corrosion/irritation	Causes skin irritation
Kit Component	**28778: ChIP Sonication Nuclear Lysis Buffer**
Serious eye damage/eye irritation	Causes serious eye irritation
Kit Component	**96529: ChIP Sonication Cell Lysis Buffer (2X)**
Serious eye damage/eye irritation	Causes serious eye irritation

Sensitization

Kit Component	**10012: Proteinase K (20 mg/ml)**
Respiratory Sensitization	Respiratory Sensitizer May cause allergy or asthma symptoms or breathing difficulties if inhaled

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**
Target Organ Effects	Central nervous system (CNS)
STOT - single exposure	May cause drowsiness or dizziness
Kit Component	**7012: Protease Inhibitor Cocktail (200X)**
Other adverse effects	May accelerate skin absorption of other materials. Special attention needed when toxic materials are present in dimethyl sulfoxide because of enhanced skin absorption.

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
glycerol	-	LC50 51 - 57 mL/L (Oncorhynchus mykiss) 96 h	EC50 500 mg/L (Daphnia magna) 24 h
dimethyl sulfoxide	EC50 12350 - 25500 mg/L (Skeletonema costatum) 96 h	LC50 34000 mg/L (Pimephales promelas) 96 h LC50 41.7 g/L (Cyprinus carpio) 96 h LC50 40 g/L (Lepomis macrochirus) 96 h LC50 33 - 37 g/L (Oncorhynchus mykiss) 96 h	EC50 7000 mg/L (Daphnia species) 24 h
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	-
trometamol	-	-	NOEC >100 mg/L (Selenastrum capricornutum) 96 h
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
sodium dodecyl sulphate	EC50 53 mg/L (Desmodesmus subspicatus) 72 h EC50 30 - 100 mg/L (Desmodesmus subspicatus) 96 h EC50 42 mg/L (Desmodesmus subspicatus) 96 h EC50 3.59 - 15.6 mg/L (Pseudokirchneriella subcapitata) 96 h EC50 117 mg/L (Pseudokirchneriella subcapitata) 96 h	LC50 8 - 12.5 mg/L (Pimephales promelas) 96 h LC50 4.1 mg/L (Leuciscus idus) 48 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 1.31 mg/L (Cyprinus carpio) 96 h LC50 15 - 18.9 mg/L (Pimephales promelas) 96 h	EC50 21.2 mg/L (Daphnia magna) 24 h EC50 1.8 mg/L (Daphnia magna) 48 h
hydrochloric acid	-	LC50 282 mg/L (Gambusia affinis) 96 h	-
sodium azide	EC50 0.35 mg/L (Pseudokirchneriella subcapitata) 96 h	LC50 0.8 mg/L (Oncorhynchus mykiss) 96 h LC50 5.46 mg/L (Pimephales promelas) 96 h LC50 0.7 mg/L (Lepomis macrochirus) 96 h	LC100 1 mg/L (Orconectes rusticus) 96 h

12.2. Persistence and degradability

.

Kit Component	**7008: ChIP Buffer (10X)**
Persistence and degradability	Not readily biodegradable
Kit Component	**10007: DNA Binding Buffer**

Persistence and degradability	Readily biodegradable

Kit Component	**7012: Protease Inhibitor Cocktail (200X)**
Persistence and degradability	Degrades to dimethyl sulfide.

12.3. Bioaccumulative potential

.

Kit Component	**10007: DNA Binding Buffer**
Bioaccumulation	Not likely to bioaccumulate

Kit Component	**7012: Protease Inhibitor Cocktail (200X)**
Bioaccumulation	Not likely to bioaccumulate

Chemical name	Octanol-Water Partition Coefficient
glycerol	-1.76
dimethyl sulfoxide	-2.03
propan-2-ol	0.05
guanidinium chloride	-1.7
sodium dodecyl sulphate	1.6

12.4. Mobility in soil

.

Kit Component	**7012: Protease Inhibitor Cocktail (200X)**
Mobility	Will likely be mobile in the environment due to its water solubility

12.5. Results of PBT and vPvB assessment

No information available.

12.6. Other adverse effects

No information available

Chemical name	EU - Endocrine Disrupters 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

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	None
EmS No.	F-E, S-D
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	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	None
Classification Code	F1
Tunnel Restriction Code	(D/E)

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	None
ERG code	3L
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

Chemical name	Candidate List of Substances of Very High Concern for Authorization Information
polyethylene glycol p-(1,1,3,3-tetramethylbutyl)phenylether (10 - 20%)	Reason for inclusion Endocrine disrupting properties, Article 57f - environment

SEVESO Directive Information

Chemical name	96/82/EC - Qualifying Quantities
hydrochloric acid	25 tonne (Lower-tier) 250 tonne (Upper-teir)

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

H314 - Causes severe skin burns and eye damage
H302 - Harmful if swallowed
H311 - Toxic in contact with skin
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H335 - May cause respiratory irritation
H412 - Harmful to aquatic life with long lasting effects
H300 - Fatal if swallowed
H400 - Very toxic to aquatic life
H410 - Very toxic to aquatic life with long lasting effects
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
H336 - May cause drowsiness or dizziness
H225 - Highly flammable liquid and vapor
H331 - Toxic if inhaled
H318 - Causes serious eye damage
H411 - 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: 2020-05-02
Revision Date: 2020-05-02

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.