



Cell Signaling

TECHNOLOGY®

SAFETY DATA SHEET (SDS): According to the OSHA Hazard Communication Standard 29 CFR 1910.1200

Issuing Date: 2014-08-15

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Version: 2

SECTION 1. Identification

Product identifier

Product number 9806
Product name RIPA Buffer (10X)
UN number UN3082

Recommended use of the chemical and restrictions on use

Identified uses For research use only. Not for use in humans.
Uses advised against This product is not intended for use in diagnostic procedures or therapeutics.
This product is not intended for use in humans or animals.

Manufacturer, importer, supplier

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Company phone number 978-867-2300
Emergency telephone number In case of emergency call CHEMTREC 1-800-424-9300

SECTION 2. Hazard(s) identification

Classification

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

Serious eye damage/eye irritation	Category 1
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GHS Label elements, including precautionary statements



Signal Word
Danger

Hazard statement(s)
Causes serious eye damage

Precautionary Statement(s)

Wear eye/face protection

Avoid release to the environment

Collect spillage

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**Hazards not otherwise classified (HNOC)** Toxic to aquatic life with long lasting effects.**SECTION 3. Composition/information on ingredients**

Chemical Name	CAS No	Weight %
tetrasodium pyrophosphate	7722-88-5	0.1-1
trometamol	77-86-1	1-5
sodium 3-alpha,12-alphadihydroxy-5beta-cholan-24-oate	302-95-4	5-10
2-[2-[4-(2,4,4-trimethylpentan-2-yl)phenoxy]ethoxy] ethanol	9036-19-5	5-10

SECTION 4. First-aid measures**Eye contact**

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

Skin contact

Wash off immediately with plenty of water for at least 15 minutes. If symptoms persist, call a physician. Immediate medical attention is not required. Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes.

Inhalation

Move to fresh air. If symptoms persist, call a physician. Immediate medical attention is not required. IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.

Ingestion

Immediate medical attention is not required. Rinse mouth. Drink plenty of water. Do NOT induce vomiting. Clean mouth with water. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Consult a physician. If swallowed, do not induce vomiting - seek medical advice.

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**

Immediate medical attention is not required. Show this safety data sheet to the doctor in attendance. If symptoms persist, call a physician.

Protection of first-aiders

Use personal protective equipment.

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.

Specific hazards arising from the chemical

No information available.

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 Use personal protective equipment. Avoid contact with the skin and the eyes. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Other information No information available.

Environmental precautions

Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

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. After cleaning, flush away traces with water. Prevent product from entering drains. Dam up.

SECTION 7. Handling and storage

Precautions for safe handling

Wear personal protective equipment. Use only in area provided with appropriate exhaust ventilation. Prevent the formation of vapors, mists and aerosols.

Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions Keep container tightly closed. Keep out of the reach of children. Keep containers tightly closed in a cool, well-ventilated place. Keep in properly labeled containers.

Packaging material No information available.

Incompatible products None known based on information supplied.

SECTION 8. Exposure controls/personal protection

Control parameters

Occupational exposure limit values			
Chemical Name	ACGIH TLV	OSHA PEL	NIOSH REL
tetrasodium pyrophosphate	-	-	TWA : 5 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. Face-shield.
Skin and body protection	Wear protective gloves/clothing.
Respiratory protection	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
Hygiene measures	When using, do not eat, drink or smoke. Remove and wash contaminated clothing before re-use. Provide regular cleaning of equipment, work area and clothing.

SECTION 9. Physical and chemical properties
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Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Clear
Odor	No information available
Color	Colorless
Odor Threshold	No information available
pH	7.5 @ 20 °C
Melting point/freezing point	No information available
Initial boiling point and boiling range	No information available
Flash point	No information available.
Evaporation rate	No information available
Flammability (solid, gas)	No information available
Upper flammability limit	No information available.
Lower flammability limit	No information available.
Vapor pressure	No information available
Vapor density	No information available
Relative density	No information available
Solubility	No information available.
Solubility in other solvents	No information available
Partition coefficient: n-octanol/water	No information available
Autoignition temperature	No information available
Decomposition temperature	No information available.
Explosive properties	No information available
Oxidizing properties	No information available
VOC content	No information available
Viscosity	No information available.
Density	No information available.

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

No information available.

Incompatible Materials

None known based on information supplied.

Hazardous Decomposition Products

None known based on information supplied.

SECTION 11. Toxicological information

Information on likely routes of exposure

Inhalation	May cause irritation of respiratory tract.
Eye contact	May cause irreversible damage to eyes.
Skin contact	Contact with skin may cause irritation.
Ingestion	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Information on toxicological effects

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.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
tetrasodium pyrophosphate	> 2000 mg/kg	-	-
trometamol	5900 mg/kg (Rat)	-	-
sodium 3-alpha,12-alpha-dihydroxy-5beta-cholan-24-oate	1370 mg/kg (Rat)	-	-
2-[2-[4-(2,4,4-trimethylpentan-2-yl)phenoxy]ethoxy]ethanol	1700 mg/kg (Rat)	-	-

ATEmix (oral) 6946 mg/kg

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

Symptoms	No information available.
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.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Chronic Toxicity	Avoid repeated exposure.
Neurological effects	No information available.
Aspiration Hazard	No information available.

SECTION 12. Ecological information

Ecotoxicity

11.03% of the mixture consists of component(s) of unknown hazards to the aquatic environment.

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
tetrasodium pyrophosphate	-	LC50 1,380 mg/L (Gambusia affinis) 96 h	-
trometamol	-	-	NOEC >100 mg/L (Selenastrum capricornutum) 96 h
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

Persistence and degradability No data is available on the product itself. Results show, that both long and short chain 4-tert-OPnEO are not readily biodegradable using standard test methods.

Bioaccumulation No information available.

Mobility No information available

Other adverse effects

In vitro studies for 4-tert-octylphenol ethoxylates and nonylphenol ethoxylates show that with increased chain length, ethoxylates decrease estrogen activity.

SECTION 13. Disposal considerations

Waste Disposal Methods

Should not be released into the environment. Dispose of in accordance with local regulations.

Disposal considerations

Do not empty into drains; dispose of this material and its container in a safe way.

SECTION 14. Transport information

DOT

UN number	UN3082
UN proper shipping name	Environmentally hazardous substance, liquid, n.o.s. (2-[2-[4-(2,4,4-trimethylpentan-2-yl)phenoxy]ethoxy]ethanol)
Transport hazard class(es)	9
Packing group	III
Special provisions	8, 146, 173, 335, IB3, T4, TP1, TP29
Emergency response guide number	171

IATA

UN number	UN3082
UN proper shipping name	Environmentally hazardous substance, liquid, n.o.s. (2-[2-[4-(2,4,4-trimethylpentan-2-yl)phenoxy]ethoxy]ethanol)
Transport hazard class(es)	9
Packing group	III
ERG code	9L


SECTION 15. Regulatory information

North American Inventory Listing

Chemical Name	TSCA 8(b)	TSCA 12(b)	DSL	NDSL
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tetrasodium pyrophosphate	Listed	Not Listed	Listed	Not Listed
trometamol	Listed	Not Listed	Listed	Not Listed
sodium 3-alpha,12-alphadihydroxy-5beta a-cholan-24-oate	Listed	Not Listed	Listed	Not Listed
2-[2-[4-(2,4,4-trimethylpentan-2-yl)phenoxy]ethoxy]ethanol	Listed	Not Listed	Listed	Not Listed

Canadian Workplace Hazardous Materials Information System (WHMIS) Classification

	Class D2B - Toxic Material at >= 1%
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SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

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

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated under applicable state right-to-know regulations

U.S. FIFRA Label Information

This product does not contain any substances regulated as pesticides.

US Commerce Department - Export Administration Regulations Information

This product does not contain any substances regulated under the Chemical Weapons Convention (CWC).

U.S. Drug Enforcement Administration Information

This product does not contain any substances regulated under the DEA.

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