Safety Data Sheet (SDS)

Issuing Date: 2023-09-25 **Version:** 1

1. Identification

A. Product identifier

Product name Tyk2 (E9H4T) Rabbit mAb

Product Code(s) 35615

B. Relevant identified uses of the substance or mixture and uses advised against

Identified uses For Research Use Only. Not for Use in Diagnostic Procedures.

Uses advised against No information available

C. Supplier's details

Manufacturer
Cell Signaling Technology, Inc.
3 Trask Lane
Danvers, MA 01923
United States
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FAX: +1 978 867 2400

Supplier
Seoulin Bioscience Co., Ltd.
경기도 성남시 분당구 대왕판교로 700
TEL: 1670-5911
E-mail: support@seoulin.co.kr

Supplier
Koram Biotech Co., Ltd.
서울시 강남구 선릉로76길 4
TEL: 02-556-0311
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Emergency telephone number **CHEMTREC** 24 hours a day, 7 days a week, 365 days a year
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080-880-0468

2. Hazard(s) identification

A. Classification of the substance or mixture

The product contains no substances which at their given concentration, are considered to be hazardous to health

B. GHS Label elements, including precautionary statements

Hazard symbols
None

Signal Word
None

Hazard Statements
None

C. Other hazards which do not result in classification

Not applicable

Legend:

3. Composition/information on ingredients

Chemical nature Mixture.

General Hazards The product contains no substances which at their given concentration, are considered to be hazardous to health.

Chemical name	CAS No	Weight-%	Other information
glycerol	56-81-5	30-60	-
sodium azide	26628-22-8	<0.02	-

4. First-aid measures

A. In case of eye contact Rinse thoroughly with plenty of water, also under the eyelids.

B. In case of skin contact Wash skin with soap and water.

C. In case of inhalation Move to fresh air.

D. In case of ingestion Clean mouth with water and afterwards drink plenty of water.

E. Indication of immediate medical attention and special treatment needed, if necessary

Note to physicians Treat symptomatically.

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.

5. Fire-fighting measures

A. Suitable (and unsuitable) extinguishing media

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

Unsuitable Extinguishing Media No information available.

B. Specific hazards arising from the chemical No information available

C. Special Protective Equipment for Firefighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. Accidental release measures

A. Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation. Avoid contact with skin, eyes or clothing.

For emergency responders Use personal protection recommended in Section 8.

B. Environmental precautions See Section 12 for additional Ecological Information.

C. Methods and material for containment and cleaning up

Legend:

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

7. Handling and storage

A. Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use.

B. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place

Incompatible products Strong oxidizing agents. Strong acids.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

8. Exposure controls/personal protection

A. Control Parameters

Occupational exposure limits

Chemical name	Korea	ACGIH TLV
glycerol	TWA 10 mg/m³	
sodium azide	Ceiling: 0.29 mg/m³	Ceiling: 0.29 mg/m³ Ceiling: 0.11 ppm

B. Appropriate engineering controls

Engineering controls Showers
Eyewash stations
Ventilation systems.

Environmental exposure controls No information available.

C. Personal Protective Equipment

Respiratory protection When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Eye protection Tight sealing safety goggles.

Hand protection Impervious gloves.

Body protection Wear suitable protective clothing.

Legend:

9. Physical and chemical properties

Information on basic physical and chemical properties

A. Appearance	Clear
Physical State	Liquid
color	Colorless
B. Odor	No information available
C. Odor Threshold	No information available

Property	Values	Remarks • Method
D. pH	7.5	@ 20 °C
E. Melting point/freezing point	No information available	None known
F. Initial boiling point and boiling range	No information available	None known
G. Flash point	No information available	None known
H. Evaporation rate	No information available	None known
I. Flammability	No information available	None known
J. Upper/lower flammability or explosive limits		
Upper flammability limit	No information available.	No information available
Lower flammability limit	No information available.	No information available
K. Vapor pressure	No information available	None known
L. Solubility(ies)		
Solubility	No information available.	None known
Solubility in other solvents	No information available	None known
M. Relative vapor density	No information available	None known
N. Specific Gravity	No information available	None known
O. Partition coefficient: n-octanol/water	No information available	None known
P. Autoignition Point	No information available	None known
Q. Decomposition temperature	No information available	None known
R. Viscosity		
Viscosity	No information available	None known
Viscosity, dynamic	No information available	None known
S. Molecular Weight	No information available	

Other information

Explosive properties	No information available
Oxidizing properties	No information available
Softening point	No information available
VOC content	No information available
Liquid Density	No information available

10. Stability and reactivity

A. Chemical stability and possibility of hazardous reactions

Stability	Stable under normal conditions.
Possibility of hazardous reactions	None under normal processing.

Explosion Data

Sensitivity to mechanical impact	None.
Sensitivity to static discharge	None.

Legend:

B. 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.

C. Incompatible products Strong oxidizing agents Strong acids

D. Hazardous Decomposition Products Nitrogen oxides (NOx).

11. Toxicological information

A. Information on the likely routes of exposure

Product Information

Inhalation Avoid breathing vapors or mists.
Ingestion Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Eye contact Avoid contact with eyes.
Skin contact Avoid contact with skin.

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.

B. Health hazards information

Numerical measures of toxicity

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)	-

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation No information available

Sensitization No information available

Carcinogenicity No information available.

Mutagenic effects No information available

Reproductive toxicity No information available.

Specific target organ toxicity (STOT) – single exposure No information available

Specific target organ toxicity (STOT) – repeated exposure No information available

Target Organ Effects No information available.

Aspiration hazard No information available.

Legend:

12. Ecological information

A. Ecotoxicity The environmental impact of this product has not been fully investigated.

Chemical name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	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
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

B. Persistence and degradability No information available.

C. Bioaccumulative potential

Chemical name	Octanol-Water Partition Coefficient
glycerol	-1.76

D. Mobility in soil No information available.

E. Other adverse effects No information available.

13. Disposal considerations

A. Waste treatment methods

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

B. Disposal considerations

Contaminated packaging Do not reuse empty containers.

14. Transport information

A. UN number Not regulated
B. UN proper shipping name Not regulated
C. Transport hazard class(es) Not regulated
D. Packing group Not regulated
E. Marine Pollutant Not regulated
F. Special precautions for user Not regulated

15. Regulatory information

Legend:

A. Industrial Safety and Health Law Not applicable

Harmful substances subject to control Not applicable
Harmful agents subject to work environment monitoring Not applicable
Harmful agents subject to workers requiring health examination Not applicable

B. Chemicals Control Act not applicable
Chemicals Control Act (CCA) - Accident Precaution Chemicals Not applicable

C. Safety Control of Dangerous Substances Act Not applicable

D. Wastes Management Dispose of waste in accordance with environmental legislation.

E. Other Regulations Not applicable

International inventories

TSCA 8(b)	Contact supplier for inventory compliance status.
DSL/NDSL	Contact supplier for inventory compliance status.
EINECS/ELINCS	Contact supplier for inventory compliance status.
ENCS	Contact supplier for inventory compliance status.
IECSC	Contact supplier for inventory compliance status.
KECL	Contact supplier for inventory compliance status.
PICCS	Contact supplier for inventory compliance status.
AICS	Contact supplier for inventory compliance status.

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

16. Other information

A. Information source and references

Prepared By No information available.

B. Issuing Date: 2023-09-25

C. Revision number and date

Version: 1

D. Other information .

Key or legend to abbreviations and acronyms used in the safety data sheet
IMDG International Maritime Dangerous Goods (IMDG)

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Legend:

TWA:	Time weighted average	STEL:	Short term exposure limit
Ceiling:	Maximum limit value:	*	Skin designation

Key literature references and sources for data used to compile the SDS
Agency for Toxic Substances and Disease Registry (ATSDR)
U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
EPA (Environmental Protection Agency)
Acute Exposure Guideline Level(s) (AEGL(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
Japan GHS Classification
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine's PubMed database (NLM PUBMED)
National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
Organization for Economic Co-operation and Development High Production Volume Chemicals Program
Organization for Economic Co-operation and Development Screening Information Data Set
RTECS (Registry of Toxic Effects of Chemical Substances)
World Health Organization

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End of Safety Data Sheet

Legend: