Safety Data Sheet (SDS)

This safety data sheet was created pursuant to the requirements of:
GB/T 16483-2008, GB/T 17519-2013

Product name 5-Hydroxymethylcytosine (5-hmC) (HMC31) Mouse mAb
(M)SDS Number 51660 **Issuing Date:** 2023-10-11
Version 1

1. Identification

Product identifier

Product name 5-Hydroxymethylcytosine (5-hmC) (HMC31) Mouse mAb

Other means of identification

(M)SDS Number 51660

Contains

Chemical name	English chemical name	CAS No
glycerol	Glycerol	56-81-5
sodium azide	Sodium azide	26628-22-8

Details of the supplier of the safety data sheet

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

Importer
Cell Signaling Technology, Inc.
Building 7
A-SUN Science & Technology Park
399 Shengxia Road
Pudong Shanghai 201210
China
TEL: 4006-473287
FAX: (86) 21-5835-6116

Supplier
No information available

E-mail address support@cellsignal.com

Emergency telephone number

Emergency telephone 400 120 4937

Recommended use of the chemical and restrictions on use

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

Restrictions on use No information available

2. Hazard(s) identification

Emergency Overview

Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)

Appearance Clear Colorless **Physical state** Liquid **Odor** No information available

Classification of the substance or mixture

Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)

Label elements

Signal Word
None

Hazard Statements
None

Physical and chemical hazards
Not applicable.

Health hazards
Immediate Health Effects: Not applicable.
Chronic effects: Not applicable.

Environmental hazards
Not applicable.

Other hazards which do not result in classification
Not applicable

3. Composition/information on ingredients

Chemical nature Mixture.

Not a hazardous substance or mixture according to the Globally Harmonized System (GHS).

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

4. First-aid measures

Description of necessary first aid measures

Inhalation Remove to fresh air.

Inhalation Move to fresh air.

Eye contact Rinse thoroughly with plenty of water, also under the eyelids.

Skin contact Wash skin with soap and water.

Ingestion Clean mouth with water and afterwards drink plenty of water.

Most important symptoms/effects, 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.
For emergency responders Ensure that medical personnel are aware of the material(s) involved, take precautions to

protect themselves and prevent spread of contamination.

Note to physicians Treat symptomatically.

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 No information available.

Specific hazards arising from the chemical No information available

Special protective actions for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions 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.

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.

Methods and material for containment and cleaning up Prevent further leakage or spillage if safe to do so Soak up with inert absorbent material Pick up and transfer to properly labeled containers

Precautions to prevent secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

7. Handling and storage

Precautions for safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Do not eat, drink or smoke when using this product. See Section 8 for information on appropriate personal protective equipment.

Conditions for safe storage, including any incompatibilities Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible materials Strong oxidizing agents. Strong acids.

8. Exposure controls/personal protection

Occupational exposure limits

Chemical name	China	ACGIH TLV
sodium azide - 26628-22-8	Ceiling 0.3 mg/m^3	Ceiling: 0.29 mg/m^3

		Ceiling: 0.11 ppm

Note See section 16 for terms and abbreviations

Biological occupational exposure limits
No data available

Monitoring and observation processes
No applicable information was found.

Engineering controls Showers
Eyewash stations
Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/face protection Tight sealing safety goggles.

Skin and body protection Wear suitable protective clothing.

Hand protection Impervious gloves.

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

General hygiene considerations Do not eat, drink or smoke when using this product.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Clear
Color	Colorless
Physical state	Liquid
Odor	No information available
Odor Threshold	No information available

Property	**Values**	**Remarks • Method**
pH	7.5	@ 20 °C
Melting point/freezing point	no data available	None known
Boiling point or initial boiling point and boiling range	no data available	None known
Flash point	no data available	None known
Evaporation rate	no data available	None known
Flammability	no data available	None known
Flammability Limits in Air		None known
Upper flammability limit	no data available	
Lower flammability limit	no data available	
Vapor pressure	no data available	None known
Relative vapor density	No data available	None known
Relative density	no data available	None known
Solubility	no data available	None known
Solubility in other solvents	no data available	None known
Partition coefficient: n-octanol/water	no data available	None known

Autoignition temperature	no data available	No information available	None known
Decomposition temperature	no data available		None known
Viscosity	no data available		None known
Viscosity, dynamic	no data available		None known

Additional information
Explosive properties No information available
Oxidizing properties No information available

10. Stability and reactivity

Stability Stable under normal conditions.

Possibility of hazardous reactions 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 products Strong oxidizing agents. Strong acids.

Hazardous Decomposition Products Nitrogen oxides (NOx).

11. Toxicological information

Acute Toxicity

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.

Respiratory or skin sensitization No information available

Mutagenic effects No information available.

Carcinogenicity No information available.

Reproductive toxicity No information available.

Specific target organ toxicity (single exposure) No information available

Specific target organ toxicity (repeated exposure) No information available

Aspiration hazard No information available.

12. Ecological information

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

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
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

Persistence and degradability No information available.

Bioaccumulative potential

Chemical name	Octanol-Water Partition Coefficient
glycerol	-1.76

Mobility in soil No information available.

13. Disposal considerations

Waste chemicals Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

14. Transport information

IMDG/IMO Not regulated

IATA Not regulated

China Not regulated

Special precautions for user
Please refer to the applicable dangerous goods regulations for additional information

15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations

Law of the People's Republic of China on Prevention and Control of Occupational Diseases

Catalog of occupational hazard factors: Not applicable.
Catalog of occupational diseases: Not applicable.

Regulations on the Control over Safety of Hazardous Chemicals
Inventory of hazardous chemicals Not applicable.

GB 18218-2009 Identification of major hazard installations for dangerous chemicals Not applicable

List of hazardous chemicals under priority management Not applicable

Regulations on Labor Protection in Workplaces Where Toxic Substances Are Used
Inventory of highly toxic goods Not applicable

Regulations for Environmental Management on the First Import of Chemicals and the Import and Export of Toxic Chemicals
List of toxic chemicals severely restricted for import and export in China Not applicable

Measures for the Environmental Management of New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances Contact supplier for inventory compliance status.

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

16. Other information

Issuing Date: 2023-10-11

Revision Note The symbol (*) in the margin of this SDS indicates that this line has been revised.

Abbreviations and acronyms
Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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

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

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