

Safety Data Sheet

This safety data sheet was created pursuant to the requirements of: The Globally Harmonized System of Classification and Labeling of Chemicals (GHS)

Issuing date: 26-Dec-2022 Revision Date: 26-Dec-2022 Version: 1

1. IDENTIFICATION

<u>Product identifier</u>

Product Name Toll-like Receptor 9 antibody

Other means of identification

Catalog NO IR329-1034

Registration Number(s) No information available <u>Recommended</u>

use of the chemical and restrictions on use

Recommended use For research use only. Not for use in diagnostic procedures

Supplier's details

Manufacturer iReal Biotechnology, Inc.

Address 7F.-3, No. 9, Sec. 3, Zhonghua Rd., North Dist., Hsinchu City, Taiwan (R.O.C.)

Tel: +886-3-5260005

Emergency telephone number

Emergency Telephone +886-3-5260005

E-mail address irealbio@irealbio.com

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Skin sensitization Category 1A

GHS Label elements, including precautionary statements



Signal word

Warning

Hazard statements

May cause an allergic skin reaction

Precautionary Statements - Prevention

Avoid breathing dust/fume/gas/mist/vapors/spray

Contaminated work clothing should not be allowed out of the workplace

Wear protective gloves/protective clothing/eye protection/face protection

Skin

IF ON SKIN: Wash with plenty of water and soap

If skin irritation or rash occurs: Get medical advice/attention

Take off contaminated clothing and wash it before reuse

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other hazards which do not result in classification

No information available

General Hazards No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable

Mixture

Chemical Name	CAS-No	Weight %
Glycerol (glycerin, glycerine)	56-81-5	20 - <50
Tris	77-86-1	1
BSA	9048-46-8	1
CMIT/MIT 3:1	55965-84-9	0.025 - <0.05

4. FIRST AID MEASURES

Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance.

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

Skin contact Wash off immediately with soap and plenty of water while removing all

contaminated clothes and shoes. May cause an allergic skin reaction. If

symptoms persist, call a physician.

Eye contact Immediately flush with plenty of water. After initial flushing, remove any

contact lenses and continue flushing for at least 15 minutes. Have eyes

examined and tested by medical personnel.

Ingestion Clean mouth with water and afterwards drink plenty of water. Do NOT induce

vomiting.

Most important symptoms and effects, both acute and delayed

Symptoms Itching. Rashes. Hives. The most important known symptoms and effects are

described in the labelling (see section 2) and/or in section 11.

Indication of any immediate medical attention and special treatment needed

Notes to physician Treat symptomatically. May cause sensitization of susceptible persons.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

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

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 May cause sensitization by inhalation and skin contact.

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

Use personal protective equipment. Avoid contact with the skin and the eyes. For personal protection see section 8.

Environmental precautions

Try to prevent the material from entering drains or water courses. See Section 12 for additional Ecological Information.

Methods and material for containment and 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.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Take Of contaminated clothing and wash before reuse.

Conditions for safe storage, including any incompatibilities

Storage conditions

Keep out of the reach of children. Keep container tightly closed. Keep containers tightly closed in a cool, well-ventilated place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure guidelines

Chemical name	China	Japan Society of Occupational Health	OEL	Australia	Taiwan
CMIT/MIT 3:1 55965-84-9	-	-	TWA: 0.1 mg/m ³	-	-
Glycerol (glycerin, glycerine) 56-81-5	-	-	TWA: 10 mg/m ³	10 mg/m ³	-

Appropriate engineering controls

Showers, eyewash stations, and ventilation systems.

<u>Individual protection measures, such as personal protective equipmen</u>

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 protectionUse suitable eye protection

Skin and body protection Wear suitable protective clothing

Hand protection Wear suitable gloves. Ensure that the breakthrough time of the glove

material is not exceeded. Refer to glove supplier for information on

breakthrough time for specific gloves.

Respiratory protection When workers are facing concentrations above the exposure limit

they must use appropriate certified respirators

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Liquid

Appearanceaqueous solutionOdorNo information availableColorcolorlessOdor thresholdNo information available

PropertyValuesRemarks • MethodMelting point / freezing pointNo data availableNone knownBoiling point / boiling rangeNo data availableNone knownFlammability (solid, gas)No data availableNone knownFlammability Limit in AirNone known

Upper flammability or explosive limits
Lower flammability or explosive limits
Flash point

Autoignition temperature

No data available
No data available
No data available

Autoignition temperature
Decomposition temperature

pH Decomposition temperature

pH (as aqueous solution)

No data available

No information available

No data available

Kinematic viscosity No data available None known Dynamic viscosity No data available None known Water solubility No data available None known Solubility(ies) No data available None known Partition coefficient No data available None known Vapor pressure No data available None known Relative density No data available None known

Bulk density

Bulk density

No data available

Liquid Density

No data available

Vapor density No data available None known

Particle characteristic

Particle SizeNo data availableParticle Size DistributionNo data available

Other information

Oxidizing propertiesNo information availableExplosive propertiesNo information available

10. STABILITY AND REACTIVITY

Reactivity

Reactivity No information available.

Chemical stability

Stability Stable under normal conditions.

Explosion data

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

Possibility of hazardous reactions

Possibility of hazardous reactionsNone under normal processing.

Conditions to avoid

Conditions to avoid None known based on information supplied.

Incompatible materials

Incompatible materialsNone known based on information supplied.

Hazardous decomposition products

Hazardous decomposition products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on the likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixture is not available.

Eye contact Specific test data for the substance or mixture is not available.

Skin contact May cause sensitization by skin contact. Specific test data for the

substance or mixture is not available. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.

(based on components).

Ingestion Specific test data for the substance or mixture is not available.

Symptoms Itching. Rashes. Hives.

Numerical measures of toxicity

Acute toxicity

Unknown acute toxicity No information available

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Glycerol (glycerin, glycerine)	12,600 mg/kg (Rat)	Rabbit - >10,000 mg/kg	
Tris	5900 mg/kg (Rat)		
CMIT/MIT 3:1	53 mg/kg (Rat)		

Delayed and immediate effects and also chronic effects from short and long term exposure

Skin corrosion/irritationNo information availableSerious eye damage/irritationNo information available

Respiratory or skin sensitizationMay cause sensitization by skin contact.

Germ cell mutagenicityNo information availableCarcinogenicityNo information availableReproductive toxicityNo information available

STOT - single exposure No information available No information available STOT - repeated exposure Aspiration hazard No information available

12. ECOLOGICAL INFORMATION

Toxicity

0 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

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

Persistence and degradability

No information available.

Bioaccumulative potential

No information available.

Mobility

No information available.

Other adverse effects

No information available.

13. DISPOSAL CONSIDERATIONS

Disposal methods

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

waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

14. TRANSPORT INFORMATION

IMDG Not regulated

Transport in bulk according to Annex II of

MARPOL 73/78 and the IBC Code

No information available

ICAO (air) Not regulated IATA Not regulated DOT Not regulated **TDG** Not regulated

Special precautions for user Special provisions from the regulations relative to the

> specified mode of transport are noted by numeric code. Refer to the regulations for the full text of special provisions.

15. REGULATORY INFORMATION

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

International Inventories

TSCA Does not comply DSL/NDSL Does not comply **EINECS/ELINCS** Does not comply **ENCS** Does not comply **IECSC** Does not comply KECL Does not comply **PICCS** Does not comply **AICS** Does not comply

Chemical name	TSCA	DSL	NDSL	EINECS	ELINCS
CMIT/MIT 3:1	-	Х	-	-	-

Chemical name	ENCS	IECSC	KECL	PICCS	AICS
CMIT/MIT 3:1	X	Х	X	Х	-

Legend: X - Listed

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 Chemical Substances/European 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

Issuing Date 26-Dec-2022 Revision date 26-Dec-2022

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

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value * Skin designation

C Carcinogen

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.