

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 : 10-Apr-2022	Revision Date : 10- Apr -2022	Version : 1
	1. IDENTIFICATION	
Product identifier		
Product Name	EpCAM antibody Biotinylated (Extracellular domain)	
Other means of identification		
Catalog NO	IR218-3-Bio	
Registration Number(s)	No information available	
Recommended use of the chem	ical and restrictions on use	
Recommended use	For research use only. Not for use in diagnostic procedures	
Supplier's details		
Manufacturer	iReal Biotechnology, Inc.	
Address	7F3, No. 9, Sec. 3, Zhonghua Rd., North Dist., Hsinchu City, Tai Tel: +886-3-5260005	wan (R.O.C.)
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	Skin sensitization Category 1A
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GHS Label elements, including precautionary 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 Eye contact	Wash off immediately with soap and plenty of water while removing all contaminatedclothes and shoes. May cause an allergic skin reaction. If symptoms persist, call a physician. 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 firefightingturnout 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.

Individual protection measures, such as personal protective equipmen

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	Use 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		
Appearance	aqueous solution	Odor	No information available
Color	colorless	Odor threshold	No information available
Property		Values	Remarks • Method
Melting point / fre		No data available	None known
Boiling point / boi		No data available	None known
Flammability (solid		No data available	None known
Flammability Limit			None known
	ility or explosive limits	No data available	
	ility or explosive limits	No data available	
Flash point		No data available	
Autoignition temp		No data available	
Decomposition te	mperature		
рН		No data available	
pH (as aqueous		No data available	No information available
Kinematic viscosit		No data available	None known
Dynamic viscos	ity	No data available	None known
Water solubility		No data available	None known
Solubility(ies)		No data available	None known
Partition coefficier	nt	No data available	None known
Vapor pressure		No data available	None known
Relative density		No data available	None known
Bulk density		No data available	
Liquid Density		No data available	
Vapor density		No data available	None known
Particle characteri	stic		
Particle Size		No data available	
Particle Size Dis	tribution	No data available	
Other information			
Oxidizing properti		No information available	
Explosive properti	es	No information available	e

10. STABILITY AND REACTIVITY

No information available.

Reactivity
Reactivity
Chemical stability
Stability
Explosion data
Sensitivity to mechanical impact
Sensitivity to static discharge
Possibility of hazardous reactions
Possibility of hazardous reactions
Conditions to avoid
Conditions to avoid
Incompatible materials
Incompatible materials
Hazardous decomposition products
Hazardous decomposition products

Stable under normal conditions. None. None under normal processing. None known based on information supplied. None known based on information supplied. 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/irritation	No information available
Serious eye damage/irritation	No information available
Respiratory or skin sensitization	May cause sensitization by skin contact.
Germ cell mutagenicity	No information available
Carcinogenicity	No information available
Reproductive toxicity	No information available

STOT - single exposure STOT - repeated exposure Aspiration hazard IR218-3-Bio EpCAM antibody Biotinylated (Extracellular domain) No information available No information available No information available

12. ECOLOGICAL INFORMATION

Toxicity

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

EcotoxicityThe environmental impact of this product has not been fully investigated.Persistence and degradabilityThe environmental impact of this product has not been fully investigated.No information available.Environmental impact of this product has not been fully investigated.MobilityNo information available.No information available.Environmental impact of this product has not been fully investigated.MobilityNo information available.Other adverse effectsEnvironmental impact of this product has not been fully investigated.

No information available.

13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues/unused products

Contaminated packaging

Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation. Do not reuse empty containers.

14. TRANSPORT INFORMATION

IMDG Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not regulated No information available
ICAO (air)	Not regulated
ΙΑΤΑ	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	Х	Х	Х	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	10- Apr-2022
Revision date	10- Apr-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
С	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.