Elabscience Biotechnology Co., Ltd MATERIAL SAFETY DATA SHEET

Antibody Reagent; Antibody Reagent for Research Use Only

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

Product name:	PD-1 Monoclonal Antibody
Catalog Number:	PA6084
Company:	Elabscience Biotechnology Co., Ltd
Address:	Building B18, 2nd Phase of Biomedical Park, #858 Gaoxin Road, Donghu Hi-
	Tech Development Area, Wuhan, Hubei, China
Email:	/
Fax:	86-27-87645690
Emergency Phone:	86-27-87385095
SDS Number:	2617050070
SDS Date:	2017-05-22

SECTION 2 HAZARDS IDENTIFICATION

Hazards Identification:

According to GHS

Skin corrosion/irritation (Category 3)

Serious eye damage/irritation (Category 2B)

The hazards not mentioned are not applicable or no data available.

Emergency Overview:

Causes mild skin irritation. Causes eye irritation.

SECTION 3 INFORMATION ON INGREDIENTS

Ingredient	Concentration	CAS No.	EC No.
Glycerol	50%	56-81-5	200-289-5
Water	48.045%	7732-18-5	231-791-2
protective protein	1%	9048-46-8	232-936-2
Sodium chloride	0.8%	7647-14-5	232-598-3
Disodium hydrogen orthophosphate	0.115%	7558-79-4	231-448-7
Potassium chloride	0.02%	7447-40-7	231-211-8
Potassium dihydrogen orthophosphate	0.02%	7778-77-0	231-913-4

SECTION 4 FIRST-AID MEASURES

Skin Exposure

In case of contact, immediately wash skin with soap and copious amounts of water. Irritation persists, call a physician.

Eye Exposure:

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. If irritation persists, call a physician.

Inhalation Exposure:

If inhaled, remove to fresh air. If necessary, get medical attention.

Oral Exposure:

Never give anything by mouth to an unconscious person. Rinse mouth with water. Call a physician.

SECTION 5 FIRE FIGHTING MEASURES

Extinguishing Media:

Suitable: Water spray, Dry chemical, Carbon dioxide or appropriate foam.

Firefighting:

Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

SECTION 6 ADDIDENTAL RELEASE MEASURES

Procedure of Personal Precaution:

Exercise appropriate precautions to minimize direct contact with skin or eyes and prevent inhalation o dust.

Methods for Cleaning up:

Absorb on sand or vermiculite and place in closed containers for disposal. Ventilate area and wash spill site after material pickup is complete.

Environmental precautions:

Do not let product enter drains.

SECTION 7 HANDLING AND STORAGE

Handling:

Wear appropriate protective clothing and safety gloves. Avoid inhalation. Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure. Mechanical exhaust required. Keep away from ignition sources, heat and flame. Incompatibilities: Strong oxidizing agents. No smoking at working site.

Storage:

Store in a cool, dry and well-ventilated area. Keep away from heat, sparks, and flame. Keep away from sources of ignition. Incompatible: Strong bases, Strong oxidizing agents, Strong acids.

SECTION 8 EXPOSURE CONTROL/PPE

Engineering Controls:

Mechanical exhaust required. Safety shower and eye bath.

Personal Protective Equipment:

Respiratory: Government approved respirator if needed.

Eye: Chemical safety goggles if needed.

Clothing: Wear appropriate protective clothing.

Hand: Protective gloves.

Other Protect:

No smoking, drinking and eating at working site. Wash thoroughly after handling.

SECTION 9 PHYSICAL/CHEMICAL PROPERTIES

Appearance:	Colorless transparent liquid
Odor:	Weak odor
Flash Point(Closed Cup)	>96.0°C
/°C :	
Initial Boiling Point/°C :	100.8℃
pH Value:	7.3(25°C , 50.0g/L)
Solubility:	Miscible in water
Density/Relative Density:	1.146×10³kg/m³(20.0℃±0.1℃)
Viscosity:	7.678mm²/s(20.00°C ±0.02°C , kinematic viscosity)

SECTION 10 STABILITY AND REACTIVITY

Stability:

Stable under normal temperatures and pressures.

Materials to Avoid:

Strong oxidizing agents.

Hazardous Polymerization:

Will not occur.

Hazardous Decomposition Products:

Carbon oxides, Sodium oxides, Phosphorous oxides, Potassium oxides, Hydrogen chloride gas.

SECTION 11 TOXICOLOGICAL INFORMATION

Acute toxicity:

Glycerol: Rat Oral LD50: 12600mg/kg

 $Rat\ Inhalation\ LC_{50} \colon >570\ mg/m^3/1H$ $Rabbit\ Skin\ LD_{50} \colon >10000\ mg/kg$

Sodium chloride: Rat Oral LD50: 3000mg/kg

Rat Inhalation LC₅₀: >42000 mg/m³/1H Rabbit Skin LD₅₀: >10000 mg/kg

Potassium chloride: Rat Oral LD50: 2600mg/kg

Potassium dihydrogen orthophosphate: Rabbit Skin LD50: >4640mg/kg

Skin corrosion/irritation:

No data available.

Serious eye damage/irritation:

No data available.

SECTION 12 ECOLOGICAL INFORMAITON

Toxicity:

Sodium chloride:

Toxicity to fish LC_{50} – Lepomis macrochirus (Bluegill) – 5840 mg/l – 96h Toxicity to daphnia and other aquatic invertebrates NOEC-Daphnia-1500mg/L-7d LC_{50} -Daphnia magna (Water flea)-1661mg/L-48h

Potassium chloride:

Toxicity to fish LC₅₀-Pimephales promelas (fathead minnow)-880mg/L-96h

Morality NOEC- Pimephales promelas (fathead minnow)-500mg/L-7d

Morality LOEC- Pimephales promelas (fathead minnow)-1000mg/L-7d

Toxicity to daphnia and other aquatic invertebrates EC₅₀-Daphnia magna (Water flea)-440mg/L-48h

Persistence and degradability:

No data available.

Bioaccumulative potential:

No data available.

Mobility in soil:

No data available.

SECTION 13 DISPOSAL CONSIDERATION

Appropriate Method of Disposal of Substance:

Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with and afterburner and scrubber. Observe all federal, state, and local environmental regulations.

SECTION 14 TRANSPORT INORMATION

RID/ADR:	Non-Hazardous for Transport: This substance is considered to be non-hazardous for	
	transport	
IATA:	Non-Hazardous for Air Transport.	
IMO:	Non-Hazardous for Sea Transport.	

SECTION 15 REGULATIRY INFORMATION

Regulation (EC) No.1272/2008 and its amendments:

Not a hazardous substance or mixture according to Regulation (EC) No.1272/2008.

SECTION 16 OTHER INFORMATION

Date:	2017-05-22	
Department:	Shanghai Research Institute of Chemical Industry Testing Centre	
	Tel(Fax):8621-52815377/52800971/52807275/52811034/52569800	
Revision:	0	
Other	The above information is believed to be correct but does not purport to be all	
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