

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Version 8.0 Revision Date 09.11.2021 Print Date 23.06.2023

GENERIC EU MSDS - NO COUNTRY SPECIFIC DATA - NO OEL DATA

# SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name : Anti-Mouse IgG (Fc specific)-Peroxidase

antibody produced in goat

Product Number : A0168 Brand : Sigma

REACH No. : This product is a mixture. REACH Registration Number see

section 3.

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich Pte Ltd

(Co. Registration No. 199403788W)

2 Science Park Drive #05-01/12 Ascent Building SINGAPORE 118222

**SINGAPORE** 

Telephone : +65 6890 6633 Fax : +65 6890 6639

E-mail address : TechnicalService@merckgroup.com

1.4 Emergency telephone

Emergency Phone # : 1-800-262-8200

# **SECTION 2: Hazards identification**

### 2.1 Classification of the substance or mixture

## Classification according to Regulation (EC) No 1272/2008

Skin sensitization (Category 1), H317

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram

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Signal word Warning

Hazard statement(s)

H317 May cause an allergic skin reaction.

Precautionary statement(s)

P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.

P272 Contaminated work clothing should not be allowed out of the

workplace.

P280 Wear protective gloves.

P302 + P352 IF ON SKIN: Wash with plenty of water.

P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.

P362 + P364 Take off contaminated clothing and wash it before reuse.

Supplemental Hazard

Statements

none

### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## **SECTION 3: Composition/information on ingredients**

## 3.2 Mixtures

Component		Classification	Concentration	
peroxidase				
CAS-No.	9003-99-0	Resp. Sens. 1; Skin Sens.	>= 0.1 - < 1	
EC-No.	232-668-6	1; H334, H317	%	
	*			
2-Methyl-4-isothiazolin-3-one				
CAS-No.	2682-20-4	Acute Tox. 3; Acute Tox.	>= 0.025 - <	
EC-No.	220-239-6	2; Acute Tox. 3; Skin Corr.	0.1 %	
Registration		1B; Eye Dam. 1; Skin		
number	01-2120764690-50-	Sens. 1A; Aquatic Acute 1;		
	XXXX	Aquatic Chronic 1; H301,		
		H330, H311, H314, H318,		
		H317, H400, H410		
		Concentration limits:		
		>= 0.0015 %: Skin Sens.		
		1A, H317;		
		M-Factor - Aquatic Acute:		
		10 - Aquatic Chronic: 1		

<sup>\*</sup>A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) No 1907/2006, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

For the full text of the H-Statements mentioned in this Section, see Section 16.

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### **SECTION 4: First aid measures**

## 4.1 Description of first-aid measures

#### **General advice**

Show this material safety data sheet to the doctor in attendance.

### If inhaled

After inhalation: fresh air.

### In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Consult a physician.

### In case of eye contact

After eye contact: rinse out with plenty of water. Remove contact lenses.

#### If swallowed

After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

## 4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

# 4.3 Indication of any immediate medical attention and special treatment needed

No data available

# **SECTION 5: Firefighting measures**

## 5.1 Extinguishing media

## Suitable extinguishing media

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

# Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

## 5.2 Special hazards arising from the substance or mixture

Nature of decomposition products not known.

Not combustible.

Ambient fire may liberate hazardous vapours.

#### **5.3** Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

### 5.4 Further information

Prevent fire extinguishing water from contaminating surface water or the ground water system.

# **SECTION 6: Accidental release measures**

### 6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

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For personal protection see section 8.

## 6.2 Environmental precautions

Do not let product enter drains.

## 6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up with liquid-absorbent material (e.g. Chemizorb® ). Dispose of properly. Clean up affected area.

## 6.4 Reference to other sections

For disposal see section 13.

### **SECTION 7: Handling and storage**

## 7.1 Precautions for safe handling

For precautions see section 2.2.

## 7.2 Conditions for safe storage, including any incompatibilities

## Storage conditions

Tightly closed.

## Storage stability

Recommended storage temperature -20 °C

### Storage class

Storage class (TRGS 510): 12: Non Combustible Liquids

## 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

# **SECTION 8: Exposure controls/personal protection**

### 8.1 Control parameters

Ingredients with workplace control parameters

#### 8.2 Exposure controls

### Personal protective equipment

### Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

### Skin protection

required

### **Body Protection**

protective clothing

# **Respiratory protection**

required when vapours/aerosols are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Recommended Filter type: Filter type ABEK

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The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

## Control of environmental exposure

Do not let product enter drains.

# **SECTION 9: Physical and chemical properties**

# 9.1 Information on basic physical and chemical properties

	<del>_</del>	
a)	Appearance	Form: liquid
b)	Odor	No data available
c)	Odor Threshold	No data available
d)	pH	No data available
e)	Melting point/freezing point	No data available
f)	Initial boiling point and boiling range	No data available
g)	Flash point	Not applicable
h)	Evaporation rate	No data available
i)	Flammability (solid, gas)	No data available
j)	Upper/lower flammability or explosive limits	No data available
k)	Vapor pressure	No data available
l)	Vapor density	No data available
m)	Density	No data available
	Relative density	No data available
n)	Water solubility	at 20 °C soluble
0)	Partition coefficient: n-octanol/water	No data available
p)	Autoignition temperature	Not applicable
q)	Decomposition temperature	No data available
r)	Viscosity	Viscosity, kinematic: No data available Viscosity, dynamic: No data available
s)	Explosive properties	Not classified as explosive.
t)	Oxidizing properties	none

# 9.2 Other safety information

No data available

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## **SECTION 10: Stability and reactivity**

### 10.1 Reactivity

No data available

### 10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature).

### 10.3 Possibility of hazardous reactions

Violent reactions possible with:

The generally known reaction partners of water.

### 10.4 Conditions to avoid

no information available

### 10.5 Incompatible materials

No data available

## 10.6 Hazardous decomposition products

In the event of fire: see section 5

## **SECTION 11: Toxicological information**

### 11.1 Information on toxicological effects

### **Mixture**

## **Acute toxicity**

Oral: No data available Inhalation: No data available Dermal: No data available

# Skin corrosion/irritation

No data available

## Serious eye damage/eye irritation

No data available

# Respiratory or skin sensitization

Mixture may cause an allergic skin reaction.

### Germ cell mutagenicity

No data available

### Carcinogenicity

No data available

## Reproductive toxicity

No data available

# Specific target organ toxicity - single exposure

No data available

## Specific target organ toxicity - repeated exposure

No data available

# Aspiration hazard

No data available

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### 11.2 Additional Information

# **Endocrine disrupting properties**

## **Product:**

Assessment The substance/mixture does not contain

components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Hazardous properties cannot be excluded but are unlikely when the product is handled appropriately.

# Components

## peroxidase

## **Acute toxicity**

Oral: No data available Inhalation: No data available Dermal: No data available

# Skin corrosion/irritation

Skin - Rabbit

Result: No irritation - 4 h (OECD Test Guideline 404)

## Serious eye damage/eye irritation

Eyes - Rabbit

Result: No eye irritation (OECD Test Guideline 405)

### Respiratory or skin sensitization

May cause allergic respiratory and skin reactions

### Germ cell mutagenicity

Test Type: Chromosome aberration test in vitro

Test system: Human lymphocytes

Result: negative Test Type: Ames test

Test system: S. typhimurium

Result: negative **Carcinogenicity** 

IARC: No ingredient of this product present at levels greater

than or equal to 0.1% is identified as probable, possible

or confirmed human carcinogen by IARC.

# Reproductive toxicity

No data available

# Specific target organ toxicity - single exposure

No data available

### Specific target organ toxicity - repeated exposure

No data available

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### **Aspiration hazard**

No data available

# 2-Methyl-4-isothiazolin-3-one

### **Acute toxicity**

LD50 Oral - Rat - male and female - 285.5 mg/kg

(OECD Test Guideline 401)

LC50 Inhalation - Rat - male and female - 4 h - 0.11 mg/l - dust/mist

(OECD Test Guideline 403)

LD50 Dermal - Rat - male and female - 242 mg/kg

(OECD Test Guideline 402)

### Skin corrosion/irritation

Skin - Rabbit

Result: Causes burns. (OECD Test Guideline 404)

## Serious eye damage/eye irritation

Eyes - Rabbit

Remarks: Causes serious eye damage.

## Respiratory or skin sensitization

Buehler Test - Guinea pig

Result: positive

(OECD Test Guideline 406)

Local lymph node assay (LLNA) - Mouse

Result: positive

(OECD Test Guideline 429)
Maximization Test - Guinea pig

Result: positive

(OECD Test Guideline 406)

# Germ cell mutagenicity

Test Type: Ames test

Test system: S. typhimurium

Result: negative

Test Type: Chromosome aberration test in vitro Test system: Chinese hamster ovary cells

Result: negative

Test Type: In vitro mammalian cell gene mutation test

Test system: Chinese hamster ovary cells

Result: negative

Test Type: Chromosome aberration test in vitro

Test system: Human lymphocytes

Result: negative

Method: OECD Test Guideline 486

Species: Rat - male

### Carcinogenicity

IARC: No ingredient of this product present at levels greater

than or equal to 0.1% is identified as probable, possible

or confirmed human carcinogen by IARC.

# Reproductive toxicity

No data available

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## Specific target organ toxicity - single exposure

No data available

## Specific target organ toxicity - repeated exposure

No data available

# **Aspiration hazard**

No data available

# **SECTION 12: Ecological information**

### 12.1 Toxicity

#### Mixture

No data available

### 12.2 Persistence and degradability

No data available

### 12.3 Bioaccumulative potential

No data available

### 12.4 Mobility in soil

No data available

### 12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

# 12.6 Endocrine disrupting properties

#### **Product:**

Assessment : The substance/mixture does not contain components

considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

### 12.7 Other adverse effects

No data available

## **Components**

### peroxidase

Toxicity to daphnia static test EC50 - Daphnia magna (Water flea) - 26.2 mg/l - 48

and other aquatic h

invertebrates (OECD Test Guideline 202)

# 2-Methyl-4-isothiazolin-3-one

Toxicity to fish flow-through test LC50 - Oncorhynchus mykiss (rainbow trout)

- 4.77 mg/l - 96 h

(OECD Test Guideline 203)

Toxicity to daphnia flow-through test EC50 - Daphnia magna (Water flea) - 0.85

and other aquatic mg/l - 48 h

invertebrates (OECD Test Guideline 202)

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static test EC50 - Skeletonema costatum - 0.069 mg/l - 96 h Toxicity to algae

(OECD Test Guideline 201)

static test EC50 - activated sludge - 41 mg/l - 3 h Toxicity to bacteria

(OECD Test Guideline 209)

## **SECTION 13: Disposal considerations**

### 13.1 Waste treatment methods

### **Product**

See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

# **SECTION 14: Transport information**

### 14.1 UN number

ADR/RID: -IMDG: -IATA: -

## 14.2 UN proper shipping name

ADR/RID: Not dangerous goods IMDG: Not dangerous goods Not dangerous goods IATA:

# 14.3 Transport hazard class(es)

ADR/RID: -IMDG: -IATA: -

### 14.4 Packaging group

ADR/RID: -IMDG: -IATA: -

### 14.5 Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

## 14.6 Special precautions for user

## **Further information**

Not classified as dangerous in the meaning of transport regulations.

### **SECTION 15: Regulatory information**

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

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

### Other regulations

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Take note of Dir 94/33/EC on the protection of young people at work.

# 15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out



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### **SECTION 16: Other information**

## Full text of H-Statements referred to under sections 2 and 3.

H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H330	Fatal if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

#### **Further information**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

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