

according to Regulation UK SI 2019/758 and UK SI 2020/1577 as amended

Creation Date 04-Sep-2018 Revision Date 05-Sep-2019 Revision Number 2

# SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product Description: Goat anti-rabbit IgG-horseradish peroxidase conjugate

Cat No. : J64022

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

Recommended Use Laboratory chemicals.
Uses advised against No Information available

1.3. Details of the supplier of the safety data sheet

Company

Avocado Research Chemicals Ltd. (Part of Thermo Fisher Scientific)

Shore Road, Heysham Lancashire, LA3 2XY, United Kingdom

Office Tel: +44 (0) 1524 850506 Office Fax: +44 (0) 1524 850608

E-mail address begel.sdsdesk@thermofisher.com

1.4. Emergency telephone number

For information **US** call: 001-800-227-6701 / **Europe** call: +32 14 57 52 11 Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99 **CHEMTREC** Tel. No. **US**:001-800-424-9300 / **Europe**:001-703-527-3887

# **SECTION 2: HAZARDS IDENTIFICATION**

## 2.1. Classification of the substance or mixture

## GHS Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567

## **Physical hazards**

Based on available data, the classification criteria are not met

#### **Health hazards**

Based on available data, the classification criteria are not met

## **Environmental hazards**

Based on available data, the classification criteria are not met

Goat anti-rabbit IgG-horseradish peroxidase conjugate

Full text of Hazard Statements: see section 16

## 2.2. Label elements

None required

#### 2.3. Other hazards

This product does not contain any known or suspected endocrine disruptors

# **SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

#### 3.2. Mixtures

Component	CAS No	EC No	Weight %	GHS Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567
Goat anti-rabbit IgG-horseradish peroxidase conjugate	N/A		95.0	-
Proprietary non-hazardous buffer	N/A		5.0	-

Full text of Hazard Statements: see section 16

# **SECTION 4: FIRST AID MEASURES**

## 4.1. Description of first aid measures

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get

medical attention.

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes. Get medical attention

immediately if symptoms occur.

Ingestion Clean mouth with water and drink afterwards plenty of water. Get medical attention if

symptoms occur.

**Inhalation** Remove to fresh air. Get medical attention immediately if symptoms occur.

**Self-Protection of the First Aider** No special precautions required.

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

None reasonably foreseeable.

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

Notes to Physician Treat symptomatically.

\_\_\_\_\_

Revision Date 05-Sep-2019

# **SECTION 5: FIREFIGHTING MEASURES**

## 5.1. Extinguishing media

## **Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam.

## Extinguishing media which must not be used for safety reasons

No information available.

## 5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors.

## **Hazardous Combustion Products**

Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>), Sulfur oxides, Nitrogen oxides (NOx).

## 5.3. Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

# **SECTION 6: ACCIDENTAL RELEASE MEASURES**

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

Ensure adequate ventilation. Use personal protective equipment as required.

#### 6.2. Environmental precautions

Should not be released into the environment. See Section 12 for additional Ecological Information.

## 6.3. Methods and material for containment and cleaning up

Sweep up and shovel into suitable containers for disposal.

## 6.4. Reference to other sections

Refer to protective measures listed in Sections 8 and 13.

# **SECTION 7: HANDLING AND STORAGE**

# 7.1. Precautions for safe handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Avoid ingestion and inhalation.

# **Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and after work.

## 7.2. Conditions for safe storage, including any incompatibilities

#### Goat anti-rabbit IgG-horseradish peroxidase conjugate

Keep container tightly closed in a dry and well-ventilated place.

Technical Rules for Hazardous Substances (TRGS) 510

Storage Class (LGK) (Germany)

Class 10

#### 7.3. Specific end use(s)

Use in laboratories

# **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

## 8.1. Control parameters

#### **Exposure limits**

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

## **Biological limit values**

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

# Derived No Effect Level (DNEL) / Derived Minimum Effect Level (DMEL)

No information available

# **Predicted No Effect Concentration (PNEC)**

No information available.

# 8.2. Exposure controls

## **Engineering Measures**

None under normal use conditions.

# Personal protective equipment

**Eye Protection** Wear safety glasses with side shields (or goggles) (European standard - EN 166)

Hand Protection Protective gloves

Glove material	Breakthrough time	Glove thickness	EU standard	Glove comments
Nitrile rubber	See manufacturers	-	EN 374	(minimum requirement)
Neoprene	recommendations			
Natural rubber				
PVC				

Skin and body protection Long sleeved clothing.

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

#### Goat anti-rabbit IgG-horseradish peroxidase conjugate

Revision Date 05-Sep-2019

Ensure gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

**Respiratory Protection** No protective equipment is needed under normal use conditions.

Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits Large scale/emergency use

are exceeded or if irritation or other symptoms are experienced

Recommended Filter type: Particle filter

Small scale/Laboratory use Maintain adequate ventilation

Recommended half mask:- Valve filtering: EN405; or; Half mask: EN140; plus filter, EN

Liquid

141

**Environmental exposure controls** No information available.

# **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

## 9.1. Information on basic physical and chemical properties

**Physical State** Liquid

**Appearance** 

No information available Odor **Odor Threshold** No data available Melting Point/Range No data available No data available **Softening Point Boiling Point/Range** No information available Flammability (liquid) No data available

Flammability (solid,gas) Not applicable

**Explosion Limits** No data available

No information available Flash Point Method - No information available

No data available **Autoignition Temperature Decomposition Temperature** No data available No information available pН No data available Viscosity

Water Solubility Miscible

Solubility in other solvents No information available

Partition Coefficient (n-octanol/water)

No data available **Vapor Pressure Density / Specific Gravity** No data available **Bulk Density** Not applicable

Liquid **Vapor Density** No data available (Air = 1.0)**Particle characteristics** Not applicable (liquid)

9.2. Other information

# **SECTION 10: STABILITY AND REACTIVITY**

10.1. Reactivity

None known, based on information available

Goat anti-rabbit IgG-horseradish peroxidase conjugate

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous PolymerizationNo information available.Hazardous ReactionsNone under normal processing.

10.4. Conditions to avoid

Heat.

10.5. Incompatible materials

Oxidizing agent.

10.6. Hazardous decomposition products

Carbon monoxide (CO). Carbon dioxide (CO2). Sulfur oxides. Nitrogen oxides (NOx).

# **SECTION 11: TOXICOLOGICAL INFORMATION**

# 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Product Information No acute toxicity information is available for this product

(a) acute toxicity;

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

Toxicology data for the components

(b) skin corrosion/irritation; No data available

(c) serious eye damage/irritation; No data available

(d) respiratory or skin sensitization;

Respiratory No data available Skin No data available

(e) germ cell mutagenicity; No data available

(f) carcinogenicity; No data available

There are no known carcinogenic chemicals in this product

(g) reproductive toxicity; No data available

(h) STOT-single exposure; No data available

(i) STOT-repeated exposure; No data available

Target Organs No information available.

ALFAAJ64022

Goat anti-rabbit IgG-horseradish peroxidase conjugate

Revision Date 05-Sep-2019

(j) aspiration hazard; No data available

Symptoms / effects,both acute and No information available.

delayed

11.2. Information on other hazards

known or suspected endocrine disruptors.

# **SECTION 12: ECOLOGICAL INFORMATION**

12.1. Toxicity

Ecotoxicity effects Contains no substances known to be hazardous to the environment or that are not

degradable in waste water treatment plants.

12.2. Persistence and degradability

**Persistence** Miscible with water, Persistence is unlikely, based on information available.

12.3. Bioaccumulative potential Bioaccumulation is unlikely

12.4. Mobility in soil

The product is water soluble, and may spread in water systems. Will likely be mobile in the

environment due to its water solubility. Highly mobile in soils

12.5. Results of PBT and vPvB

assessment

No data available for assessment.

12.6. Endocrine disrupting

properties

Endocrine Disruptor Information This product does not

This product does not contain any known or suspected endocrine disruptors

12.7. Other adverse effects

Persistent Organic Pollutant Ozone Depletion Potential This product does not contain any known or suspected substance This product does not contain any known or suspected substance

# **SECTION 13: DISPOSAL CONSIDERATIONS**

13.1. Waste treatment methods

Waste from Residues/Unused

**Products** 

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Consult local, regional, and national hazardous waste regulations to

ensure complete and accurate classification.

Contaminated Packaging Empty remaining contents. Dispose of in accordance with local regulations. Do not re-use

empty containers.

European Waste Catalogue (EWC) According to the European Waste Catalog, Waste Codes are not product specific, but

application specific.

Goat anti-rabbit IgG-horseradish peroxidase conjugate

Revision Date 05-Sep-2019

Other Information

Waste codes should be assigned by the user based on the application for which the product was used.

# **SECTION 14: TRANSPORT INFORMATION**

Not regulated IMDG/IMO

14.1. UN number

14.2. UN proper shipping name

14.3. Transport hazard class(es)

14.4. Packing group

ADR Not regulated

14.1. UN number

14.2. UN proper shipping name

14.3. Transport hazard class(es)

14.4. Packing group

IATA Not regulated

14.1. UN number

14.2. UN proper shipping name

14.3. Transport hazard class(es)

14.4. Packing group

No hazards identified 14.5. Environmental hazards

14.6. Special precautions for user No special precautions required.

14.7. Maritime transport in bulk

according to IMO instruments

**SECTION 15: REGULATORY INFORMATION** 

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

Not applicable, packaged goods

#### International Inventories

Europe (EINECS/ELINCS/NLP), China (IECSC), Taiwan (TCSI), Korea (KECL), Japan (ENCS), Japan (ISHL), Canada (DSL/NDSL), Australia (AICS), New Zealand (NZIoC), Philippines (PICCS). US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

Component	CAS No	EINECS	ELINCS	NLP	IECSC	TCSI	KECL	ENCS	ISHL
Goat anti-rabbit IgG-horseradish	N/A	-	-	-	-	-	-	-	-
peroxidase conjugate									
Proprietary non-hazardous buffer	N/A	-	-	-	-	-	-	-	-

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	DSL	NDSL	AICS	NZIoC	PICCS
Goat anti-rabbit IgG-horseradish peroxidase conjugate	N/A	-	-	-	-	-	-	-
Proprietary non-hazardous buffer	N/A	-	-	-	-	-	-	-

Legend: X - Listed '-' - Not Listed KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

Goat anti-rabbit IgG-horseradish peroxidase conjugate

## Authorisation/Restrictions according to EU REACH

Not applicable

Component	CAS No	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization		REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
Goat anti-rabbit IgG-horseradish peroxidase conjugate	N/A	-	-	-
Proprietary non-hazardous buffer	N/A	-	-	-

# Seveso III Directive (2012/18/EC)

Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements
Goat anti-rabbit IgG-horseradish peroxidase conjugate	N/A	Not applicable	Not applicable
Proprietary non-hazardous buffer	N/A	Not applicable	Not applicable

Regulation (EC) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of dangerous chemicals

Not applicable

Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)? Not applicable

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work .

## **National Regulations**

UK - Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment

**WGK Classification** Water endangering class = non-hazardous to waters (self classification)

## 15.2. Chemical safety assessment

Chemical Safety Assessment/Reports (CSA/CSR) are not required for mixtures

# **SECTION 16: OTHER INFORMATION**

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

Legend

#### Goat anti-rabbit IgG-horseradish peroxidase conjugate

CAS - Chemical Abstracts Service

Revision Date 05-Sep-2019

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical **DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List of Notified Chemical Substances List

Substances/EU List of Notified Chemical Substances

Substances List

PICCS - Philippines Inventory of Chemicals and Chemical Substances

ENCS - Japanese Existing and New Chemical Substances

IECSC - Chinese Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

NZIOC - New Zealand Inventory of Chemicals

WEL - Workplace Exposure Limit TWA - Time Weighted Average

ACGIH - American Conference of Governmental Industrial Hygienists IARC - International Agency for Research on Cancer

**DNEL** - Derived No Effect Level Predicted No Effect Concentration (PNEC)

RPE - Respiratory Protective Equipment

LC50 - Lethal Concentration 50%

NOEC - No Observed Effect Concentration

POW - Partition coefficient Octanol:Water

**POW** - Partition coefficient Octanol:Water **PBT** - Persistent, Bioaccumulative, Toxic **POW** - Partition coefficient Octanol:Water **vPvB** - very Persistent, very Bioaccumulative

ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road

ICAO/IATA - International Civil Aviation Organization/International Air Transport Association

IMO/IMDG - International Maritime Organization/International Maritime MARPOL - International Convention for the Prevention of Pollution from

Dangerous Goods Code
Ships
OECD - Organisation for Economic Co-operation and Development
ATE - Acute Toxicity Estimate

BCF - Bioconcentration factor

VOC - (Volatile Organic Compound)

Key literature references and sources for data

https://echa.europa.eu/information-on-chemicals

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

# Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Physical hazards

Health Hazards

Calculation method

Environmental hazards

Calculation method

**Training Advice** 

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

Prepared By Health, Safety and Environmental Department

Creation Date 04-Sep-2018
Revision Date 05-Sep-2019

**Revision Summary** New emergency telephone response service provider.

# This safety data sheet complies with Regulation UK SI 2019/758 and UK SI 2020/1577 as amended.

## 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**