

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

1.1. Product identifier

Product form : Substance
Trade name : Avidin
EC-No. : 215-783-6
CAS-No. : 1405-69-2

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

1.2.1. Relevant identified uses

Use of the substance/mixture : R&D use only

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Fordras SA, A Bioseutica Group Company
Corso Elvezia 4, CH-6900 Lugano, Switzerland
Phone: +41 (0)91 9119036 - Fax: +41 (0)91 9119037

info-fordras@bioseutica.com

1.4. Emergency telephone number

Emergency number : QESH Manager Bioseutica BV
+31-(0)36- 5234059 (business hours)
+31-(0)6- 12376175 (24 hours)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin Irrit. Category 2 : H315
Eye Irrit. Category 2 : H319
STOT SE 3 : H335 (lungs) (Inhalation)

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]



Hazard pictograms (CLP) :
Signal word (CLP) : Warning
Hazard statements (CLP) : H315- Causes skin irritation
: H319- Causes serious eye irritation
: H335-May cause respiratory irritation

2.3. Other hazards

PBT: not yet assessed
vPvB: not yet assessed

Avidin

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

SECTION 3: Composition/information on ingredients

3.1. Substances

Name	Product identifier	%
Avidin	CAS-No.: 1405-69-2 EC-No.: 215-783-6	90

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	:	Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	:	Allow affected person to breathe fresh air. Allow the victim to rest.
First-aid measures after skin contact	:	Rinse skin with water/shower. Take off immediately all contaminated clothing. Obtain medical attention if irritation persists.
First-aid measures after eye contact	:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.
First-aid measures after ingestion	:	Rinse mouth. Do NOT induce vomiting. If you feel unwell, seek medical advice. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs.

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

Symptoms/effects	:	Persons suffering from egg allergies should take special precautions to avoid inhalation, contact and ingestion as product is egg white protein.
Symptoms/effects after inhalation	:	At high concentrations, the vapors can be irritating to the respiratory system.
Symptoms/effects after skin contact	:	May cause skin irritation.
Symptoms/effects after eye contact	:	Contact may cause eye irritation.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	:	Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media	:	Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard	:	The product itself does not burn.
-------------	---	-----------------------------------

5.3. Advice for firefighters

Precautionary measures fire	:	Avoid contact with skin and eyes. Evacuate the personnel away from the fumes.
Firefighting instructions	:	Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protective equipment for firefighters	:	Do not enter fire area without proper protective equipment, including respiratory protection.

Avidin

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Avidin

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Avoid breathing dust. Avoid creating or spreading dust.

6.1.1. For non-emergency personnel

Protective equipment : Wear personal protection equipment.
Emergency procedures : Evacuate unnecessary personnel.
Measures in case of dust release : Avoid contact with skin, eyes and clothing.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.
Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Flush residue with large amounts of water.
Other information : Ensure adequate ventilation. Wash contaminated clothes.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid dust formation. Provide good ventilation in process area to prevent formation of vapor.
Hygiene measures : Wash hands, forearms and face thoroughly after handling. Do not eat, drink or smoke in areas where product is used. Remove all contaminated clothing and footwear.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Ensure adequate ventilation.
Storage conditions : Keep only in the original container. at -20°C.
Incompatible materials : Sources of ignition. Direct sunlight. Heat sources.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

Avidin

3.1.3. Control banding

Safety Data Sheet available

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Provide local exhaust or general room ventilation to minimize exposure to dust.

8.2.2. Personal protection equipment

Personal protective equipment:

Gloves. Dust production: dust mask with filter type P2. Protective clothing. Safety glasses.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

In case of dust production: protective goggles. EN 166

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Chemical resistant protective gloves (EN 374) suitable with prolonged, direct contact. Butyl rubber gloves. Breakthrough time : > 480 min. 0.7 mm. short-term. Nitrile rubber gloves. 0.4 mm. Breakthrough time : > 30 min

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. Wear breathing apparatus if exposed to vapours/dusts/aerosols. EN 14387

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Do not allow uncontrolled discharge of product into the environment. The final disposal of this material should be supervised by a specialist, following applicable environmental legislation.

Other information:

Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Solid
Colour	:	White
Appearance	:	Powder.
Molecular mass	:	66.000 – 69.000 g/mol
Odour	:	Almost odorless.
Odour threshold	:	Not available
Melting point	:	Not available
Freezing point	:	Not available
Boiling point	:	Not available
Flammability	:	Non flammable
Explosive properties	:	None known.
Oxidising properties	:	None known.

Explosive limits	:	Not applicable
Lower explosive limit (LEL)	:	Not applicable
Upper explosive limit (UEL)	:	Not applicable

Flash point	:	Not applicable
Auto-ignition temperature	:	Not applicable
Decomposition temperature	:	Not available
pH	:	10.5 (isoelectric point)
pH solution	:	Not available
Viscosity, kinematic	:	Not applicable
Solubility	:	In water, material soluble.
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Vapour pressure	:	Not available
Vapour pressure at 50 °C	:	Not available
Density	:	Not available
Relative density	:	Not available
Relative vapour density at 20 °C	:	Not applicable
Particle size	:	Not available
Particle size distribution	:	Not available
Particle shape	:	Not available
Particle aspect ratio	:	Not available
Particle aggregation state	:	Not available
Particle agglomeration state	:	Not available
Particle specific surface area	:	Not available
Particle dustiness	:	Not available

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions of use.

10.2. Chemical stability

Stable under normal conditions of use.

10.3. Possibility of hazardous reactions

Product will not undergo polymerization.

10.4. Conditions to avoid

Direct sunlight.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

No hazardous decomposition products under suitable storage and usage conditions as prescribed.

SECTION 11: Toxicological information

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

Acute toxicity (oral)	:	Not classified
Acute toxicity (dermal)	:	Not classified
Acute toxicity (inhalation)	:	Not classified

17/03/2025

EN (English)

8/9

Skin corrosion/irritation	:	Not classified pH: 10.5 isoelectric point
Serious eye damage/irritation	:	Not classified pH: 10.5 isoelectric point
Respiratory or skin sensitisation	:	May cause allergic or asthma symptoms or breathing difficulties if inhaled.
Germ cell mutagenicity	:	Not classified
Carcinogenicity	:	Not classified
Additional information	:	Based on available data, the classification criteria are not met
Reproductive toxicity	:	Not classified
STOT-single exposure	:	Not classified
STOT-repeated exposure	:	Not classified
Aspiration hazard	:	Not classified

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties:

The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

11.2.2. Other information

Potential Adverse human health effects and symptoms:: Based on available data, the classification criteria are not met

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Not classified

12.2. Persistence and degradability

Avidin (1405-69-2)

Persistence and degradability	Not established.
-------------------------------	------------------

12.3. Bioaccumulative potential

Avidin (1405-69-2)

Bioaccumulative potential	Not established.
---------------------------	------------------

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

Avidin (1405-69-2)

PBT: not yet assessed

vPvB: not yet assessed

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

Additional information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)				

Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available				

14.6. Special precautions for user

Overland transport

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

Inland waterway transport

Not applicable

Rail transport

Not applicable

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

Avidin is not on the REACH Candidate List

Avidin is not on the REACH Annex XIV List

Avidin is not subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Avidin is not subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

15.1.2. National regulations

Germany

Employment restrictions	:	Observe restrictions according Act on the Protection of Working Mothers (MuSchG) Observe restrictions according Act on the Protection of Young People in Employment (JArbSchG)
Water hazard class (WGK)	:	Not classified according to Regulation Governing Systems for Handling Substances Hazardous to Waters (AwSV)
Hazardous Incident Ordinance (12. BImSchV)	:	Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

SZW-lijst van kankerverwekkende stoffen	:	The substance is not listed
SZW-lijst van mutagene stoffen	:	The substance is not listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding	:	The substance is not listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen –	:	The substance is not listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling	:	The substance is not listed

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms

WGK	Water Hazard Class
VOC	Volatile Organic Compounds
vPvB	vPvB - Very Persistent and Very Bioaccumulative
TLV	TLV- Threshold Limit Value
STEL	Short-Term Exposure Limit
SDS	SDS - Safety Data Sheet
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
ADR	Overland transport (ADR)
OECD	Organisation for Economic Co-operation and Development
N.O.S.	Not Otherwise Specified
OEL	Occupational Exposure Limit
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
LD50	Median lethal dose
LC50	Median lethal concentration
EC50	Median effective concentration
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
EC-No.	European Community number
CSR	CSR - Chemical Safety Report

Sources of Key data : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : None.

Full text of H- and EUH-statements:

H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.