

acc. to 29 CFR 1910.1200 App D

HP1α Antibody

version number: GHS 1.0 date of compilation: 2022-09-16

SECTION 1: Identification

1.1 product identifier

trade name ${\bf HP1}\alpha~{\bf Antibody}$

product code(s) C15410070

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

relevant identified uses for research use only, not for use in diagnostic or

therapeutic procedures.

1.3 details of the supplier of the safety data sheet

Diagenode SA LIEGE SCIENCE PARK Rue du Bois Saint-Jean, 3 4102 Seraing Belgium

telephone: +32 4 364 20 50 e-mail: info@diagenode.com

1.4 emergency telephone number

emergency information service +32 4 364 20 50

this number is only available during the following of-

fice hours: Mon-Fri 09:00 AM - 05:00 PM

| poison center | | |
|---------------|--|----------------|
| country | name | telephone |
| United States | American Association of Poison Control Centers | 1-800-222-1222 |

SECTION 2: Hazard(s) identification

2.1 classification of the substance or mixture

classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

| section | hazard class | category | hazard class and cat- egory | hazard state- ment |
|---------|--------------------|----------|--------------------------------|-----------------------|
| A.4S | skin sensitization | 1 | Skin Sens. 1 | H317 |

for full text of abbreviations: see SECTION 16.

2.2 label elements

labelling acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

- signal word warning

- pictograms

GHS07



- hazard statements

H317 may cause an allergic skin reaction.

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- precautionary statements

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

P272 contaminated work clothing must not be allowed out of the workplace.
P280 wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 if on skin: Wash with plenty of water. P321 specific treatment (see on this label).

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

P363 wash contaminated clothing before reuse.

P501 dispose of contents/container to industrial combustion plant.

- hazardous ingredients for labelling proclin 300

2.3 other hazards

hazards not otherwise classified

toxic to aquatic life with long lasting effects (GHS category 2: aquatic toxicity - acute and/or chronic).

SECTION 3: Composition/information on ingredients

3.1 substances

not relevant (mixture)

3.2 mixtures

description of the mixture

This product is composed of antibodies in aqueous buffer solution. It contains 0.05% sodium azide and 0,05% ProClin™ 300 as preservative.

| name of substance | identifier | wt% | classification acc. to GHS | pictograms |
|-------------------|----------------------|------|--|------------|
| proclin 300 | CAS No 55965-84-9 | 0.05 | Acute Tox. 4 / H302 Acute Tox. 3 / H311 Acute Tox. 4 / H332 Skin Corr. 1C / H314 Eye Dam. 1 / H318 Skin Sens. 1A / H317 | |

for full text of abbreviations: see SECTION 16.

SECTION 4: First-aid measures

4.1 description of first-aid measures

general notes

do not leave affected person unattended. remove victim out of the danger area. keep affected person warm, still and covered. take off immediately all contaminated clothing. in all cases of doubt, or when symptoms persist, seek medical advice. in case of unconsciousness place person in the recovery position. Never give anything by mouth.

following inhalation

if breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. provide fresh air.

following skin contact

wash with plenty of soap and water.

following eye contact

remove contact lenses, if present and easy to do. Continue rinsing. irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

following ingestion

rinse mouth with water (only if the person is conscious). do NOT induce vomiting.

4.2 most important symptoms and effects, both acute and delayed

symptoms and effects are not known to date.

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4.3 indication of any immediate medical attention and special treatment needed

none

SECTION 5: Fire-fighting measures

5.1 extinguishing media

suitable extinguishing media water spray, BC-powder, carbon dioxide (CO2) unsuitable extinguishing media water jet

5.2 special hazards arising from the substance or mixture

hazardous combustion products nitrogen oxides (NOx)

5.3 advice for firefighters

in case of fire and/or explosion do not breathe fumes. coordinate firefighting measures to the fire surroundings. do not allow firefighting water to enter drains or water courses. collect contaminated firefighting water separately. fight fire with normal precautions from a reasonable distance.

SECTION 6: Accidental release measures

6.1 personal precautions, protective equipment and emergency procedures

for non-emergency personnel

remove persons to safety.

for emergency responders

 $wear\ breathing\ apparatus\ if\ exposed\ to\ vapors/dust/aerosols/gases.$

6.2 environmental precautions

keep away from drains, surface and ground water. retain contaminated washing water and dispose of it. if substance has entered a water course or sewer, inform the responsible authority.

6.3 methods and material for containment and cleaning up

advice on how to contain a spill

covering of drains

advice on how to clean up a spill

wipe up with absorbent material (e.g. cloth, fleece). collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

appropriate containment techniques

use of adsorbent materials.

other information relating to spills and releases

place in appropriate containers for disposal. ventilate affected area.

6.4 reference to other sections

hazardous combustion products: see section 5. personal protective equipment: see section 8. incompatible materials: see section 10. disposal considerations: see section 13.

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SECTION 7: Handling and storage

7.1 precautions for safe handling

recommendations

- measures to prevent fire as well as aerosol and dust generation use local and general ventilation. use only in well-ventilated areas.

advice on general occupational hygiene

wash hands after use. do not eat, drink and smoke in work areas. remove contaminated clothing and protective equipment before entering eating areas. never keep food or drink in the vicinity of chemicals. never place chemicals in containers that are normally used for food or drink. keep away from food, drink and animal feedingstuffs.

7.2 conditions for safe storage, including any incompatibilities

control of the effects

protect against external exposure, such as

frost

- packaging compatibilities only packagings which are approved (e.g. acc. to the Dangerous Goods Regulations) may be used.

7.3 specific end use(s)

see section 16 for a general overview.

SECTION 8: Exposure controls/personal protection

8.1 control parameters

this information is not available.

| relevant DNELs of components of the mixture | | | | | | |
|---|------------|----------|------------------------|---------------------------------------|-------------------|-------------------------|
| name of substance | CAS No | endpoint | threshold level | protection goal, route of exposure | used in | exposure time |
| proclin 300 | 55965-84-9 | DNEL | 0.02 mg/m ³ | human, inhalatory | worker (industry) | chronic - local effects |
| proclin 300 | 55965-84-9 | DNEL | 0.04 mg/m ³ | human, inhalatory | worker (industry) | acute - local effects |

relevant PNECs of components of the mixture

| name of substance | CAS No | endpoint | threshold level | organism | environmental compartment | exposure time |
|-------------------|------------|----------|-------------------------------------|----------------------------|---------------------------------|-----------------------------------|
| proclin 300 | 55965-84-9 | PNEC | 3.39 ^{µg} / _l | aquatic organisms | freshwater | short-term (single in- stance) |
| proclin 300 | 55965-84-9 | PNEC | 3.39 ^{µg} / _l | aquatic organisms | marine water | short-term (single in- stance) |
| proclin 300 | 55965-84-9 | PNEC | 0.23 ^{mg} / _l | aquatic organisms | sewage treatment plant (STP) | short-term (single in- stance) |
| proclin 300 | 55965-84-9 | PNEC | 0.027 ^{mg} / _{kg} | aquatic organisms | freshwater sediment | short-term (single in- stance) |
| proclin 300 | 55965-84-9 | PNEC | 0.027 ^{mg} / _{kg} | aquatic organisms | marine sediment | short-term (single in- stance) |
| proclin 300 | 55965-84-9 | PNEC | 0.01 ^{mg} / _{kg} | terrestrial organ- isms | soil | short-term (single in- stance) |

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8.2 exposure controls

appropriate engineering controls

general ventilation.

individual protection measures (personal protective equipment)

eye/face protection

wear eye/face protection.

skin protection

- hand protection

wear suitable gloves. chemical protection gloves are suitable, which are tested according to EN 374. check leak-tightness/impermeability prior to use. in the case of wanting to use the gloves again, clean them before taking off and air them well. for special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- other protection measures

take recovery periods for skin regeneration. preventive skin protection (barrier creams/ointments) is recommended. wash hands thoroughly after handling.

respiratory protection

in case of inadequate ventilation wear respiratory protection.

environmental exposure controls

use appropriate container to avoid environmental contamination. keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 information on basic physical and chemical properties

appearance

| physical state | liquid |
|----------------|-----------------------|
| color | colorless |
| particle | not relevant (liquid) |
| odor | odorless |

other safety parameters

| pH (value) | not determined |
|---|-----------------------|
| melting point/freezing point | not determined |
| initial boiling point and boiling range | not determined |
| flash point | not determined |
| evaporation rate | not determined |
| flammability (solid, gas) | not relevant, (fluid) |
| vapor pressure | not determined |
| density | not determined |

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| vapor density | this information is not available |
|-----------------------------|---|
| relative density | information on this property is not available |
| solubility(ies) | not determined |
| partition coefficient | |
| - n-octanol/water (log KOW) | this information is not available |
| auto-ignition temperature | not determined |
| viscosity | not determined |
| explosive properties | none |

| 9.2 other information there is no additional information |
|--|
|--|

none

SECTION 10: Stability and reactivity

oxidizing properties

10.1 reactivity

concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

10.2 chemical stability

see below "Conditions to avoid".

10.3 possibility of hazardous reactions

no known hazardous reactions.

10.4 conditions to avoid

there are no specific conditions known which have to be avoided.

10.5 incompatible materials

there is no additional information.

10.6 hazardous decomposition products

reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 information on toxicological effects

test data are not available for the complete mixture.

classification procedure

the method for classification of the mixture is based on ingredients of the mixture (additivity formula).

classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

acute toxicity

shall not be classified as acutely toxic.

skin corrosion/irritation

shall not be classified as corrosive/irritant to skin.

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serious eye damage/eye irritation

shall not be classified as seriously damaging to the eye or eye irritant.

respiratory or skin sensitization

may cause an allergic skin reaction.

germ cell mutagenicity

shall not be classified as germ cell mutagenic.

carcinogenicity

shall not be classified as carcinogenic.

reproductive toxicity

shall not be classified as a reproductive toxicant.

specific target organ toxicity - single exposure

shall not be classified as a specific target organ toxicant (single exposure).

specific target organ toxicity - repeated exposure

shall not be classified as a specific target organ toxicant (repeated exposure).

aspiration hazard

shall not be classified as presenting an aspiration hazard.

SECTION 12: Ecological information

12.1 toxicity

toxic to aquatic life with long lasting effects.

| aquatic toxicity (acute) of components of the mixture | | | | | | |
|---|------------|----------|-----------------------------------|-----------------------|------------------|--|
| name of substance | CAS No | endpoint | value | species | exposure time | |
| proclin 300 | 55965-84-9 | LC50 | 0.19 ^{mg} / _l | fish | 96 h | |
| proclin 300 | 55965-84-9 | EC50 | 0.16 ^{mg} / _l | aquatic invertebrates | 48 h | |
| proclin 300 | 55965-84-9 | ErC50 | 19.9 ^{µg} / _L | algae | 72 h | |

aquatic toxicity (chronic) of components of the mixture name of substance CAS No value exposure endpoint species time 14 d $0.07 \, \text{mg/}_{\text{l}}$ proclin 300 55965-84-9 LC50 fish proclin 300 55965-84-9 EC50 \rightarrow 0.18 $^{mg}/_{l}$ aquatic invertebrates 21 d proclin 300 55965-84-9 ErC50 $45.6 \, ^{\mu g}/_{l}$ algae 120 h

12.2 persistence and degradability

data are not available.

12.3 bioaccumulative potential

data are not available.

12.4 mobility in soil

data are not available.

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12.5 results of PBT and vPvB assessment

data are not available.

12.6 endocrine disrupting properties

information on this property is not available.

other adverse effects **12.7**

data are not available.

SECTION 13: Disposal considerations

13.1 waste treatment methods

sewage disposal-relevant information

do not empty into drains. avoid release to the environment. Refer to special instructions/safety data sheets.

waste treatment of containers/packages

only packagings which are approved (e.g. acc. to DOT) may be used. completely emptied packages can be recycled. handle contaminated packages in the same way as the substance itself.

remarks

please consider the relevant national or regional provisions. waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

SECTION 14: Transport information

14.1 UN number

DOT UN 3082 IMDG-Code UN 3082 ICAO-TI UN 3082

14.2 UN proper shipping name

DOT Environmentally hazardous substance, liquid, n.o.s. IMDG-Code ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LI-

QUID, N.O.S.

ICAO-TI Environmentally hazardous substance, liquid, n.o.s.

sodium azide, proclin 300 technical name (hazardous ingredients)

14.3 transport hazard class(es)

DOT 9 IMDG-Code 9 ICAO-TI

14.4 packing group

DOT Ш IMDG-Code Ш ICAO-TI Ш

environmental hazards 14.5

environmentally hazardous substance (aquatic

environment)

hazardous to the aquatic environment

sodium azide, proclin 300

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14.6 special precautions for user

there is no additional information.

14.7 transport in bulk according to IMO instruments

the cargo is not intended to be carried in bulk.

Information for each of the UN Model Regulations

transport of dangerous goods by road or rail (49 CFR US DOT) - additional information

particulars in the shipper's declaration UN3082, Environmentally hazardous substance, li-

quid, n.o.s., (sodium azide, proclin 300, solution), 9,

Ш

danger label(s) 9, fish and tree

environmental hazards yes (hazardous to the aquatic environment) special provisions (SP) 8, 146, 173, 335, IB3, T4, TP1, TP29

ERG No 171

International Maritime Dangerous Goods Code (IMDG) - additional information

marine pollutant yes (hazardous to the aquatic environment) (sodium azide)

danger label(s) 9, fish and tree



special provisions (SP) 274, 335, 969

excepted quantities (EQ) E1
limited quantities (LQ) 5 L
EmS F-A, S-F
stowage category A

International Civil Aviation Organization (ICAO-IATA/DGR) - additional information

environmental hazards yes (hazardous to the aquatic environment)

danger label(s) 9, fish and tree



special provisions (SP) A97, A158, A197, A215

excepted quantities (EQ) E1 limited quantities (LQ) 30 kg

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SECTION 15: Regulatory information

15.1 safety, health and environmental regulations specific for the product in question

industry or sector specific available guidance(s)

NPCA-HMIS® III

Hazardous Materials Identification System. American Coatings Association.

| category | rating | description |
|---------------------|--------|--|
| Chronic | / | none |
| Health | 2 | temporary or minor injury may occur |
| Flammability | 0 | material that will not burn under typical fire conditions |
| Physical hazard | 0 | material that is normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosive |
| Personal protection | - | |

NFPA® 704

National Fire Protection Association: Standard System for the Identification of the Hazards of Materials for Emergency Response (United States).

| category | degree of hazard | description |
|----------------|---------------------|--|
| Flammability | 0 | material that will not burn under typical fire conditions |
| Health | 2 | material that, under emergency conditions, can cause temporary incapacitation or residual injury |
| Instability | 0 | material that is normally stable, even under fire conditions |
| Special hazard | | |

15.2 Chemical Safety Assessment

chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information, including date of preparation or last revision

abbreviations and acronyms

| abbr. | descriptions of used abbreviations |
|---------------|--|
| 49 CFR US DOT | 49 CFR U.S. Department of Transportation |
| Acute Tox. | Acute toxicity |
| CAS | Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances) |
| DGR | Dangerous Goods Regulations (see IATA/DGR) |
| DNEL | Derived No-Effect Level |
| DOT | Department of Transportation (USA) |
| EC50 | Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval |
| EmS | Emergency Schedule |

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| abbr. | descriptions of used abbreviations |
|----------------|--|
| ErC50 | ≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control |
| ERG No | Emergency Response Guidebook - Number |
| Eye Dam. | Seriously damaging to the eye |
| Eye Irrit. | Irritant to the eye |
| GHS | "Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations |
| IATA | International Air Transport Association |
| IATA/DGR | Dangerous Goods Regulations (DGR) for the air transport (IATA) |
| ICAO | International Civil Aviation Organization |
| ICAO-TI | Technical instructions for the safe transport of dangerous goods by air |
| IMDG | International Maritime Dangerous Goods Code |
| IMDG-Code | International Maritime Dangerous Goods Code |
| LC50 | Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % leth- ality during a specified time interval |
| NPCA-HMIS® III | National Paint and Coatings Association: Hazardous Materials Identification System - HMIS® III, Third Edition |
| OSHA | Occupational Safety and Health Administration (United States) |
| PBT | Persistent, Bioaccumulative and Toxic |
| PNEC | Predicted No-Effect Concentration |
| RTECS | Registry of Toxic Effects of Chemical Substances (database of NIOSH with toxicological information) |
| Skin Corr. | Corrosive to skin |
| Skin Irrit. | Irritant to skin |
| Skin Sens. | Skin sensitization |
| vPvB | Very Persistent and very Bioaccumulative |

key literature references and sources for data

OSHA Hazard Communication Standard (HCS), 29 CFR 1910.1200.

transport of dangerous goods by road or rail (49 CFR US DOT). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

classification procedure

physical and chemical properties: the classification is based on tested mixture.

health hazards, environmental hazards: the method for classification of the mixture is based on ingredients of the mixture (additivity formula).

list of relevant phrases (code and full text as stated in section 2 and 3)

| code | text |
|------|--|
| H302 | Harmful 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. |

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| code | text |
|------|---------------------|
| H332 | Harmful if inhaled. |

disclaimer

this information is based upon the present state of our knowledge. this SDS has been compiled and is solely intended for this product

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