diagenode
Innovating Epigenetics Solutions

Safety Data Sheet

acc. to 29 CFR 1910.1200 App D

JMJD2a Antibody

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

SECTION 1: Identification

1.1 product identifier

trade name: **JMJD2a Antibody**

product code(s): C15410126

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 office 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 category	hazard statement
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.

- 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.

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.

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/m³	human, inhalatory	worker (industry)	chronic - local effects
proclin 300	55965-84-9	DNEL	0.04 mg/m³	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 instance)
proclin 300	55965-84-9	PNEC	3.39 µg/l	aquatic organisms	marine water	short-term (single instance)
proclin 300	55965-84-9	PNEC	0.23 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
proclin 300	55965-84-9	PNEC	0.027 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
proclin 300	55965-84-9	PNEC	0.027 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
proclin 300	55965-84-9	PNEC	0.01 mg/kg	terrestrial organisms	soil	short-term (single instance)

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

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
oxidizing properties	none

9.2	**other information**	there is no additional information

SECTION 10: Stability and reactivity

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.

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	endpoint	value	species	exposure time
proclin 300	55965-84-9	LC50	0.07 $^{mg}/_{l}$	fish	14 d
proclin 300	55965-84-9	EC50	→0.18 $^{mg}/_{l}$	aquatic invertebrates	21 d
proclin 300	55965-84-9	ErC50	45.6 $^{µg}/_{l}$	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.

12.5 results of PBT and vPvB assessment

data are not available.

12.6 endocrine disrupting properties

information on this property is not available.

12.7 other adverse effects

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, LIQUID, N.O.S.
ICAO-TI	Environmentally hazardous substance, liquid, n.o.s.
technical name (hazardous ingredients)	sodium azide, proclin 300

14.3 transport hazard class(es)

DOT	9
IMDG-Code	9
ICAO-TI	9

14.4 packing group

DOT	III
IMDG-Code	III
ICAO-TI	III

14.5 environmental hazards

hazardous to the aquatic environment

environmentally hazardous substance (aquatic environment) sodium azide, proclin 300

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

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

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 % lethality 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.

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.