

according to Regulation (EC) No. 1907/2006 (REACH)

LMNA monoclonal antibody

version number: GHS 1.0 date of compilation: 2020-09-08

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

1.1 product identifier

trade name LMNA monoclonal antibody

registration number (REACH) not relevant (mixture)

product code(s) C15200243

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

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 centre | | |
|----------------|--------------------------------------|-----------|
| country | name | telephone |
| United Kingdom | National Poisons Information Service | 111 |

SECTION 2: Hazards identification

2.1 classification of the substance or mixture

classification according to Regulation (EC) No 1272/2008 (CLP)

| section | hazard class | category | hazard class and cat- egory | hazard state- ment |
|---------|-----------------------|----------|--------------------------------|-----------------------|
| 3.10 | acute toxicity (oral) | 4 | Acute Tox. 4 | H302 |

for full text of abbreviations: see SECTION 16.

2.2 label elements

labelling according to Regulation (EC) No 1272/2008 (CLP)

signal word warning

- pictograms

GHS07



- hazard statements

H302 harmful if swallowed.

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- precautionary statements

P264 wash thoroughly after handling.

P270 do not eat, drink or smoke when using this product.

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

P330 rinse mouth.

P501 dispose of contents/container to industrial combustion plant.

- supplemental hazard information

EUH032 contact with acids liberates very toxic gas.

- hazardous ingredients for labelling sodium azide

2.3 other hazards

results of PBT and vPvB assessment

this mixture does not contain any substances that are assessed to be a PBT or a vPvB.

SECTION 3: Composition/information on ingredients

3.1 substances

not relevant (mixture)

3.2 mixtures

description of the mixture

description of the mixture

| name of substance | identifier | wt% | classification acc. to GHS | pictograms |
|-------------------|--|-----|--|------------|
| sodium azide | CAS No 26628-22-8 | 0.1 | Acute Tox. 1 / H300 Acute Tox. 1 / H310 Acute Tox. 2 / H330 | |
| | EC No 247-852-1 | | STOT RE 2 / H373 Aquatic Acute 1 / H400 Aquatic Chronic 1 / H410 | · · · |
| | index No 011-004-00-7 | | .,, | |
| | REACH Reg. No 01-2119457019-37-xxxx | | | |

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.

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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: Firefighting measures

5.1 extinguishing media

water jet

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

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. co-ordinate 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 vapours/dust/spray/gases.

6.2 environmental precautions

keep away from drains, surface and ground water. retain contaminated washing water and dispose of it.

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 effects

protect against external exposure, such as

7.3 specific end use(s)

see section 16 for a general overview.

SECTION 8: Exposure controls/personal protection

8.1 control parameters

occupational exposure limit values (Workplace Exposure Limits)

| - | • | | | - | - | | | | | |
|--------------|---------------|------------|-----------------|-----------|-------------|---------------|-----------------|----------------------|---------------|----------------|
| coun- try | name of agent | CAS No | identi- fier | TWA [ppm] | TWA [mg/m³] | STEL [ppm] | STEL [mg/m³] | Ceiling-C [mg/m³] | nota- tion | source |
| EU | sodium azide | 26628-22-8 | IOELV | | 0.1 | | 0.3 | | | 2000/39/ EC |
| GB | sodium azide | 26628-22-8 | WEL | | 0.1 | | 0.3 | | | EH40/ 2005 |

notation

Ceiling-C STEL ceiling value is a limit value above which exposure should not occur

short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)

less otherwise specified)

TWA time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-

weighted average (unless otherwise specified)

relevant DNELs of components of the mixture

| name of substance | CAS No | endpoint | threshold level | protection goal, route of exposure | used in | exposure time |
|-------------------|------------|----------|-------------------------|---------------------------------------|-------------------|-------------------------------|
| sodium azide | 26628-22-8 | DNEL | 0.164 mg/m ³ | human, inhalatory | worker (industry) | chronic - systemic effects |
| sodium azide | 26628-22-8 | DNEL | 46.7 μg/kg | human, dermal | worker (industry) | chronic - systemic effects |

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relevant PNECs of components of the mixture

| name of substance | CAS No | endpoint | threshold level | organism | environmental compartment | exposure time |
|-------------------|------------|----------|------------------------------------|-------------------|---------------------------------|------------------------------|
| sodium azide | 26628-22-8 | PNEC | 0.35 ^{µg} / _l | aquatic organisms | freshwater | short-term (single instance) |
| sodium azide | 26628-22-8 | PNEC | 30 ^{μg} /ι | aquatic organisms | sewage treatment plant (STP) | short-term (single instance) |
| sodium azide | 26628-22-8 | PNEC | 16.7 ^{µg} / _{kg} | aquatic organisms | freshwater sedi- ment | short-term (single instance) |
| sodium azide | 26628-22-8 | PNEC | 0.72 ^{µg} / _{kg} | aquatic organisms | marine sediment | 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 |
|----------------|------------|
| colour | colourless |
| odour | odourless |

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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) |
| explosive limits | not determined |
| vapour pressure | not determined |
| density | not determined |
| vapour 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 |
| oxidising 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.

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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 according to GHS (1272/2008/EC, CLP)

acute toxicity

harmful if swallowed.

GHS of the United Nations, annex 4: may be harmful in contact with skin.

- acute toxicity estimate (ATE)

oral 500 ^{mg}/_{kg}

acute toxicity estimate (ATE) of components of the mixture

| , | | | |
|-------------------|------------|-----------------------|--|
| name of substance | CAS No | exposure route | ATE |
| sodium azide | 26628-22-8 | oral | 0.5 ^{mg} / _{kg} |
| sodium azide | 26628-22-8 | dermal | 5 ^{mg} / _{kg} |
| sodium azide | 26628-22-8 | inhalation: dust/mist | 0.054 ^{mg} / _l /4h |

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 sensitisation

shall not be classified as a respiratory or skin sensitiser.

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.

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SECTION 12: Ecological information

12.1 toxicity

shall not be classified as hazardous to the aquatic environment.

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 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/packagings

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 | not subject to transport regulations |
|------|----------------------------|--------------------------------------|
| 14.2 | UN proper shipping name | not relevant |
| 14.3 | transport hazard class(es) | none |

14.4 packing group not assigned to a packing group

14.5 environmental hazards non-environmentally hazardous acc. to the danger-

ous goods regulations

14.6 special precautions for user

there is no additional information.

14.7 transport in bulk according to Annex II of MARPOL and the IBC Code

the cargo is not intended to be carried in bulk.

Information for each of the UN Model Regulations

transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)

not subject to ADR, RID and ADN.

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International Maritime Dangerous Goods Code (IMDG)

not subject to IMDG.

International Civil Aviation Organization (ICAO-IATA/DGR)

not subject to ICAO-IATA.

SECTION 15: Regulatory information

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

15.2 Chemical Safety Assessment

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

SECTION 16: Other information

abbreviations and acronyms

| abbr. | descriptions of used abbreviations |
|-----------------|---|
| 2000/39/EC | Commission Directive establishing a first list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC |
| Acute Tox. | Acute toxicity |
| ADN | Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways) |
| ADR | Accord européen relatif au transport international des marchandises dangereuses par route (European Agree- ment concerning the International Carriage of Dangerous Goods by Road) |
| Aquatic Acute | Hazardous to the aquatic environment - acute hazard |
| Aquatic Chronic | Hazardous to the aquatic environment - chronic hazard |
| ATE | Acute Toxicity Estimate |
| CAS | Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances) |
| Ceiling-C | Ceiling value |
| CLP | Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures |
| DGR | Dangerous Goods Regulations (see IATA/DGR) |
| DNEL | Derived No-Effect Level |
| EC No | The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union) |
| EH40/2005 | EH40/2005 Workplace exposure limits (http://www.nationalarchives.gov.uk/doc/open-government-licence/) |
| EINECS | European Inventory of Existing Commercial Chemical Substances |
| ELINCS | European List of Notified Chemical Substances |
| 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) |
| ICA0 | International Civil Aviation Organization |
| IMDG | International Maritime Dangerous Goods Code |
| index No | The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008 |

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| abbr. | descriptions of used abbreviations |
|---------|--|
| IOELV | Indicative occupational exposure limit value |
| MARPOL | International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant") |
| NLP | No-Longer Polymer |
| PBT | Persistent, Bioaccumulative and Toxic |
| PNEC | Predicted No-Effect Concentration |
| ppm | Parts per million |
| REACH | Registration, Evaluation, Authorisation and Restriction of Chemicals |
| RID | Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations con- cerning the International carriage of Dangerous goods by Rail) |
| STEL | Short-term exposure limit |
| STOT RE | Specific target organ toxicity - repeated exposure |
| TWA | Time-weighted average |
| vPvB | Very Persistent and very Bioaccumulative |
| WEL | Workplace exposure limit |

key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU.

transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). 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 chapter 2 and 3)

| code | text |
|------|--|
| H300 | Fatal if swallowed. |
| H302 | Harmful if swallowed. |
| H310 | Fatal in contact with skin. |
| H330 | Fatal if inhaled. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |

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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