10/20/2020
Kit Components

| Product code | Description |
| :--- | :--- |

P2151
pGEM®-3Z Vector, 20ug
Components:

| P215 | pGEM® -3Z Vector |
| :--- | :--- |

Safety Data Sheet
acc. to OSHA HCS
Printing date 10/20/2020

## 1 Identification

## Product identifier

Trade name: pGEM® -3Z Vector
Article number: P215
Application of the substance / the mixture For Laboratory Use
Details of the supplier of the safety data sheet
Manufacturer/Supplier:
Promega Corporation
2800 Woods Hollow Road
Madison, WI 53711
U.S.A.

1-800-356-9526 or (608)-274-4330
Information department:
SDS author: ChemicalRegulatory@promega.com
Promega Corporation
2800 Woods Hollow Road
Madison, WI 53711
U.S.A.

1-800-356-9526 or (608)-274-4330
Emergency telephone number:
For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300
Outside USA and Canada: +1 703-527-3887 (collect calls accepted)

## 2 Hazard(s) identification

Classification of the substance or mixture
The product is not classified as hazardous according to the Globally Harmonized System (GHS).

## Label elements

GHS label elements Not applicable
Hazard pictograms Not applicable
Signal word Not applicable
Hazard statements Not applicable
Classification system:
NFPA ratings (scale 0-4)
Health $=0$
Fire $=0$
Reactivity $=0$
HMIS-ratings (scale 0-4)
Health $=0$
Fire $=0$
Reactivity $=0$
OSHA Hazard Overview (Criteria according to 29CFR1910.1200): Not applicable
Target Organ(s): Not applicable or unknown

Other hazards
Results of PBT and vPvB assessment
PBT: Not applicable.
$\boldsymbol{v P v B}:$ Not applicable.

## 3 Composition/information on ingredients

Chemical characterization: Mixtures
Description:
The product is made up of a mixture of non-hazardous components. The exact concentration percentages and components name may be withheld as a Promega Corp. trade secret.
Dangerous components: Not applicable
Additional information: For the wording of the listed risk phrases refer to section 15.

## 4 First-aid measures

Description of first aid measures
General information: No special measures required.
After inhalation: If the patient feels unwell or is concerned, obtain medical advice.
After skin contact: Generally the product does not irritate the skin.
After eye contact: Rinse opened eye for several minutes under running water.
After swallowing: If the patient feels unwell or is concerned, obtain medical advice.
Information for doctor:
Most important symptoms and effects, both acute and delayed
None
No further relevant information available.
Indication of any immediate medical attention and special treatment needed
No further relevant information available.

## 5 Fire-fighting measures

Extinguishing media
Suitable extinguishing agents:
CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Special hazards arising from the substance or mixture
None known
No further relevant information available.
Advice for firefighters No special advice
Protective equipment: No special measures required.

## 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures Not required.
Environmental precautions: Dilute with plenty of water.
Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Reference to other sections
No dangerous substances are released.
See Section 7 for information on safe handling.

Trade name: pGEM® -3Z Vector

See Section 13 for disposal information.

## 7 Handling and storage

## Handling:

Precautions for safe handling No special measures required.
Information about protection against explosions and fires: The product is not flammable.
Conditions for safe storage, including any incompatibilities
Storage:
Requirements to be met by storerooms and receptacles: No special requirements.
Information about storage in one common storage facility: Not required.
Further information about storage conditions: None.
Specific end use(s) No further relevant information available.

## 8 Exposure controls/personal protection

## Control parameters

Components with limit values that require monitoring at the workplace:
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
Additional information: The lists that were valid during the creation were used as basis.

## Exposure controls

Personal protective equipment:
General protective and hygienic measures:
The usual precautionary measures for handling chemicals should be followed.
Breathing equipment: Not required.
Protection of hands: Not required.
Material of gloves
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. Eye protection: Not required.

## 9 Physical and chemical properties

## Information on basic physical and chemical properties

General Information
Appearance:
Form: Fluid
Color: Colorless
Odor: Not determined
Odor threshold: Not determined.
pH-value at $20^{\circ} \mathrm{C}\left(68{ }^{\circ} \mathrm{F}\right): \quad 7.4$
Change in condition
Melting point/Melting range: $\quad 0^{\circ} \mathrm{C}\left(32^{\circ} \mathrm{F}\right)$
Boiling point/Boiling range: $\quad 100^{\circ} \mathrm{C}\left(212^{\circ} \mathrm{F}\right)$
Flash point: Not applicable.
Flammability (solid, gaseous): Not applicable.

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|  |  | (Contd. of page 3) |
| :---: | :---: | :---: |
| Decomposition temperature: | Not determined. |  |
| Auto igniting: | Product is not selfigniting. |  |
| Danger of explosion: <br> Explosion limits: <br> Lower: <br> Upper: <br> Vapor pressure: | Product does not present an explosion hazard. <br> Not determined. <br> Not determined. <br> Not determined. |  |
| Density at $20^{\circ} \mathrm{C}\left(68{ }^{\circ} \mathrm{F}\right)$ : <br> Relative density <br> Vapor density <br> Evaporation rate <br> Solubility in / Miscibility with <br> Water: <br> Partition coefficient (n-octanol/water): <br> Viscosity: <br> Dynamic: <br> Kinematic: <br> Water: <br> VOC content: | $1 \mathrm{~g} / \mathrm{cm}^{3}$ (8.345 lbs/gal) <br> Not determined. <br> Not determined. <br> Not determined. <br> Fully miscible. <br> Not determined <br> Not determined. <br> Not determined. <br> $99.7 \%$ <br> $0.00 \%$ |  |
| Solids content: Other information | $0.1 \%$ <br> No further relevant information available. |  |

## 10 Stability and reactivity

Reactivity No further relevant information available.
Chemical stability
Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
Possibility of hazardous reactions No dangerous reactions known.
Conditions to avoid No further relevant information available.
Incompatible materials: No further relevant information available.
Hazardous decomposition products: No dangerous decomposition products known.

## 11 Toxicological information

Information on toxicological effects
Acute toxicity:
LD/LC50 values that are relevant for classification: No data available
Primary irritant effect:
on the skin: No irritant effect.
on the eye: No irritating effect.
Sensitization: No sensitizing effects known.
Additional toxicological information:
The product is not subject to classification according to internally approved calculation methods for preparations:

Carcinogenic categories
IARC (International Agency for Research on Cancer)
None of the ingredients are listed.

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| NTP (National Toxicology Program) | (Contd. of page 4) |
| :--- | :--- |
| None of the ingredients are listed. |  |
| OSHA-Ca (Occupational Safety \& Health Administration) |  |
| None of the ingredients are listed. |  |

## 12 Ecological information

## Toxicity

Aquatic toxicity:
Not available
No further relevant information available.
Persistence and degradability
Not available
No further relevant information available.
Bioaccumulative potential
Not known
No further relevant information available.
Mobility in soil No further relevant information available.
Ecotoxicological effects:
Remark: Not available
Additional ecological information:
General notes:
Not available.
Not known to be hazardous to water.
Results of PBT and vPvB assessment
PBT: Not applicable.
$\boldsymbol{v P v B}$ : Not applicable.
Other adverse effects No further relevant information available.

13 Disposal considerations

## Waste treatment methods

Recommendation:
Disposal should be in accordance with applicable regional, national and local laws and regulations.
Refer to Section 7: Handling and Storage and Section 8: Exposure Control/Personal Protection for additional handling information and protection of employees.
Uncleaned packagings:
Recommendation: Disposal must be made according to official regulations.
Recommended cleansing agent: Water, if necessary with cleansing agents.

## 14 Transport information

| UN-Number | Not hazardous for transportation |
| :--- | :--- |
| DOT, ADR, ADN, IMDG, IATA | Not applicable |
| UN proper shipping name | None |
| DOT, ADR, ADN, IMDG, IATA | Not applicable |
| Transport hazard class(es) | None |

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(Contd. of page 5)

| DOT, ADR, ADN, IMDG, IATA <br> Class | Not applicable |
| :--- | :--- |
| Packing group <br> DOT, ADR, IMDG, IATA | None |
| Environmental hazards: <br> Marine pollutant: | Not applicable |
| Special precautions for user | No |
| Transport in bulk according to Annex II of <br> MARPOL73/78 and the IBC Code | Not applicable. |
| $\boldsymbol{U N}$ "Model Regulation": | Not applicable |

## 15 Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture Sara
Section 355 (extremely hazardous substances):
None of the ingredients are listed.
Section 313 (Specific toxic chemical listings):
None of the ingredients are listed.
Hazardous Air Pollutants
None of the ingredients are listed.
Proposition 65
Chemicals known to cause cancer:
None of the ingredients are listed.
Chemicals known to cause reproductive toxicity for females:
None of the ingredients are listed.

| Chemicals known to cause reproductive toxicity for males: |
| :--- |
| None of the ingredients are listed. |

Chemicals known to cause developmental toxicity:
None of the ingredients are listed.
Cancerogenity categories
EPA (Environmental Protection Agency)
None of the ingredients are listed.
TLV (Threshold Limit Value established by ACGIH)
None of the ingredients are listed.
NIOSH-Ca (National Institute for Occupational Safety and Health)
None of the ingredients are listed.
GHS label elements Not applicable
Signal word Not applicable
Hazard statements Not applicable
Water hazard class: Generally not hazardous for water.

## Trade name: pGEM® ${ }^{\circledR}$-3Z Vector

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

## 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

## Department issuing SDS:

Promega Corporation
Chemical Regulatory Department
2800 Woods Hollow Road
Madison, WI
Ph:(608)274-4330
Date of preparation / last revision 10/20/2020 / 1.0
Abbreviations and acronyms:
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: Internation Civil Aviation Organization
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
$v P v B$ : very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety \& Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit

* Data compared to the previous version altered.

