



Pullulanase/Limit-Dextrinase Assay Kit (PullG6 Method)

Kit Safety Information Sheet

Date of issue: 10/02/2015

Revision date: 24/01/2019

Supersedes: 12/10/2017

Version: 1.3

SECTION 1: Kit identification

1.1. Kit identifier

Product name : Pullulanase/Limit-Dextrinase Assay Kit (PullG6 Method)
Product code : K-PullG6

1.2. Details of the supplier of the KIT safety information sheet

Megazyme
Bray Business Park
A98 YV29 Bray - Ireland
T +353 12861220 - F +353 12861264
cs@megazyme.com - www.megazyme.com

SECTION 2: General information

This product is a Kit which consists of several independently packaged components

This Kit should be handled in accordance with good laboratory practices and appropriate personal protective equipment should be used

SECTION 3: Kit contents

| Name | General description | Quantity | Unit | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|---|---------------------|----------|--------------|---|
| Pullulanase/Limit-Dextrinase Assay Kit (PullG6 Method) (Bottle 1) | Reagent | 2 | pcs (pieces) | Acute Tox. 3 (Oral), H301 Resp. Sens. 1, H334 Aquatic Chronic 2, H411 |
| Pullulanase/Limit-Dextrinase Assay Kit (PullG6 Method) (Bottle 3) | Buffer | 1 | pcs (pieces) | Skin Irrit. 2, H315 Eye Irrit. 2, H319 |

No substance or mixture included in the following Kit components is hazardous according to Regulation (EC) No. 1272/2008 [CLP] and therefore the requirements of Regulation (EU) 2015/830 do not apply

| Name | General description | Quantity | Unit |
|---|---------------------|----------|--------------|
| Pullulanase/Limit-Dextrinase Assay Kit (PullG6 Method) (Bottle 2) | Reagent | 1 | pcs (pieces) |
| Pullulanase/Limit-Dextrinase Assay Kit (PullG6 Method) (Bottle 4) | Reagent | 1 | pcs (pieces) |

SECTION 4: General advice

No data available

SECTION 5: Safe handling advice

Environmental precautions : Avoid release to the environment
Storage conditions : Store in a well-ventilated place.
Keep cool.
Precautions for safe handling : Ensure good ventilation of the work station
Wear personal protective equipment

SECTION 6: First aid measures

First-aid measures after eye contact : Rinse eyes with water as a precaution
First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : Wash skin with plenty of water
Other medical advice or treatment : Treat symptomatically

SECTION 7: Fire fighting measures

Pullulanase/Limit-Dextrinase Assay Kit (PullG6 Method)

Kit Safety Information Sheet

| | | |
|--|---|---|
| Protection during firefighting | : | Do not attempt to take action without suitable protective equipment Self-contained breathing apparatus Complete protective clothing |
| Hazardous decomposition products in case of fire | : | Toxic fumes may be released |

SECTION 8: Other information

No data available



Pullulanase/Limit-Dextrinase Assay Kit (PullG6 Method) (Bottle 4)

Safety Data Sheet

according to Regulation (EU) 2015/830

Date of issue: 10/02/2015

Revision date: 24/01/2018

Supersedes: 14/03/2017

Version: 1.2

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

1.1. Product identifier

Product form : Mixture
Product name : Pullulanase/Limit-Dextrinase Assay Kit (PullG6 Method) (Bottle 4)
Product code : K-PullG6 (Bottle 4)

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

1.2.1. Relevant identified uses

Main use category : Professional use
Use of the substance/mixture : Use as laboratory reagent

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Manufacturer

Megazyme
Bray Business Park
A98 YV29 Bray - Ireland
T +353 12861220 - F +353 12861264
cs@megazyme.com - www.megazyme.com

1.4. Emergency telephone number

Emergency number : +353 12861220 [9 am to 5 pm GMT - Monday to Friday]

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Not classified

Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

2.2. Label elements

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

No labelling applicable

Labelling according to: exemption for inner packaging where the contents do not exceed 10ml

No labelling required

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

This mixture does not contain any substances to be mentioned according to the criteria of section 3.2 of REACH annex II

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : Wash skin with plenty of water.
First-aid measures after eye contact : Rinse eyes with water as a precaution.

Pullulanase/Limit-Dextrinase Assay Kit (PullG6 Method) (Bottle 4)

Safety Data Sheet

according to Regulation (EU) 2015/830

First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

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

No additional information available

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Mechanically recover the product.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Hand protection:

Protective gloves

| Type | Material | Permeation | Thickness (mm) | Penetration | Standard |
|-------------------|----------------------|------------------|----------------|-------------|----------|
| Disposable gloves | Nitrile rubber (NBR) | 3 (> 60 minutes) | | 2 (< 1.5) | EN 374 |

Eye protection:

Safety glasses

Pullulanase/Limit-Dextrinase Assay Kit (PullG6 Method) (Bottle 4)

Safety Data Sheet

according to Regulation (EU) 2015/830

| Type | Use | Characteristics | Standard |
|----------------|------|-------------------|----------|
| Safety glasses | Dust | With side shields | EN 174 |

Skin and body protection:

Wear suitable protective clothing

| Type | Standard |
|----------|----------|
| Lab coat | |

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

| Device | Filter type | Condition | Standard |
|-----------|-------------|--------------------------------|----------------|
| Dust mask | Type P1 | Protection for Solid particles | EN 143, EN 149 |



Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|--|--------------------------------|
| Physical state | : Solid |
| Colour | : No data available on colour. |
| Odour | : None. |
| Odour threshold | : No data available |
| pH | : 5 |
| Relative evaporation rate (butylacetate=1) | : No data available |
| Melting point | : No data available |
| Freezing point | : Not applicable |
| Boiling point | : No data available |
| Flash point | : Not applicable |
| Auto-ignition temperature | : Not applicable |
| Decomposition temperature | : No data available |
| Flammability (solid, gas) | : Non flammable. |
| Vapour pressure | : No data available |
| Relative vapour density at 20 °C | : No data available |
| Relative density | : Not applicable |
| Solubility | : Soluble in water. |
| Log Pow | : No data available |
| Viscosity, kinematic | : Not applicable |
| Viscosity, dynamic | : No data available |
| Explosive properties | : No data available |
| Oxidising properties | : No data available |
| Explosive limits | : Not applicable |

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

Pullulanase/Limit-Dextrinase Assay Kit (PullG6 Method) (Bottle 4)

Safety Data Sheet

according to Regulation (EU) 2015/830

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

| | |
|-----------------------------------|---------------------------|
| Acute toxicity (oral) | : Not classified |
| Acute toxicity (dermal) | : Not classified |
| Acute toxicity (inhalation) | : Not classified |
| Skin corrosion/irritation | : Not classified pH: 5 |
| Serious eye damage/irritation | : Not classified pH: 5 |
| Respiratory or skin sensitisation | : Not classified |
| Germ cell mutagenicity | : Not classified |
| Carcinogenicity | : Not classified |
| Reproductive toxicity | : Not classified |
| STOT-single exposure | : Not classified |
| STOT-repeated exposure | : Not classified |
| Aspiration hazard | : Not classified |

SECTION 12: Ecological information

12.1. Toxicity

| | |
|--------------------------|---|
| Ecology - general | : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment. |
| Acute aquatic toxicity | : Not classified |
| Chronic aquatic toxicity | : Not classified |

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

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

| ADR | IATA |
|--------------------------------------|----------------|
| 14.1. UN number | |
| Not applicable | Not applicable |
| 14.2. UN proper shipping name | |
| Not applicable | Not applicable |

Pullulanase/Limit-Dextrinase Assay Kit (PullG6 Method) (Bottle 4)

Safety Data Sheet

according to Regulation (EU) 2015/830

| ADR | IATA |
|---|----------------|
| 14.3. Transport hazard class(es) | |
| Not applicable | Not applicable |
| 14.4. Packing group | |
| Not applicable | Not applicable |
| 14.5. Environmental hazards | |
| Not applicable | Not applicable |
| No supplementary information available | |

14.6. Special precautions for user

- Overland transport

Not applicable

- Air transport

Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

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

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

SDS EU (REACH Annex II)

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.



Pullulanase/Limit-Dextrinase Assay Kit (PullG6 Method) (Bottle 3)

Safety Data Sheet

according to Regulation (EU) 2015/830

Date of issue: 10/02/2015

Revision date: 12/10/2017

Supersedes: 14/03/2017

Version: 1.2

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

1.1. Product identifier

Product form : Mixture
Product name : Pullulanase/Limit-Dextrinase Assay Kit (PullG6 Method) (Bottle 3)
Product code : K-PullG6 (Bottle 3)

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

1.2.1. Relevant identified uses

Main use category : Professional use
Use of the substance/mixture : Use as laboratory reagent

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Manufacturer

Megazyme
Bray Business Park
A98 YV29 Bray - Ireland
T +353 12861220 - F +353 12861264
cs@megazyme.com - www.megazyme.com

1.4. Emergency telephone number

Emergency number : +353 12861220 [9 am to 5 pm GMT - Monday to Friday]

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Skin corrosion/irritation, Category 2 H315

Serious eye damage/eye irritation, Category 2 H319

2

Full text of H statements : see section 16

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) :



GHS07

Signal word (CLP) : Warning
Hazard statements (CLP) : H315 - Causes skin irritation.
H319 - Causes serious eye irritation
Precautionary statements (CLP) : P264 - Wash hands thoroughly after handling.
P280 - Wear protective gloves, protective clothing, eye protection
P302+P352 - IF ON SKIN: Wash with plenty of water.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P321 - Specific treatment (see supplemental first aid instruction on this label)
P332+P313 - If skin irritation occurs: Get medical advice/attention.
EUH-statements : EUH032 - Contact with acids liberates very toxic gas.

Pullulanase/Limit-Dextrinase Assay Kit (PullG6 Method) (Bottle 3)

Safety Data Sheet

according to Regulation (EU) 2015/830

Labelling according to: exemption for packages of a capacity of 125ml or less

Hazard pictograms (CLP) :



GHS07

Signal word (CLP) :

Warning

EUH-statements

: EUH032 - Contact with acids liberates very toxic gas.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|---|---|---------|---|
| acetic acid ... % (Note B) | (CAS-No.) 64-19-7 (EC-No.) 200-580-7 (EC Index-No.) 607-002-00-6 | 10 - 20 | Flam. Liq. 3, H226 Skin Corr. 1A, H314 |
| sodium azide substance with a Community workplace exposure limit | (CAS-No.) 26628-22-8 (EC-No.) 247-852-1 (EC Index-No.) 011-004-00-7 | < 0.1 | Acute Tox. 2 (Oral), H300 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 |

Specific concentration limits:

| Name | Product identifier | Specific concentration limits |
|-------------------|--|---|
| acetic acid ... % | (CAS-No.) 64-19-7 (EC-No.) 200-580-7 (EC Index-No.) 607-002-00-6 | (10 =<C < 25) Skin Irrit. 2, H315 (10 =<C < 25) Eye Irrit. 2, H319 (25 =<C < 90) Skin Corr. 1B, H314 (C >= 90) Skin Corr. 1A, H314 |

Note B : Some substances (acids, bases, etc.) are placed on the market in aqueous solutions at various concentrations and, therefore, these solutions require different classification and labelling since the hazards vary at different concentrations. In Part 3 entries with Note B have a general designation of the following type: 'nitric acid ... %'. In this case the supplier must state the percentage concentration of the solution on the label. Unless otherwise stated, it is assumed that the percentage concentration is calculated on a weight/weight basis.

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

| | |
|---------------------------------------|--|
| First-aid measures general | : Call a physician immediately. |
| First-aid measures after inhalation | : Remove person to fresh air and keep comfortable for breathing. |
| First-aid measures after skin contact | : Rinse skin with water/shower. Take off immediately all contaminated clothing. Call a physician immediately. |
| First-aid measures after eye contact | : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately. |
| First-aid measures after ingestion | : Rinse mouth. Do not induce vomiting. Call a physician immediately. |

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

| | |
|-------------------------------------|---------------------------|
| Symptoms/effects after skin contact | : Burns. |
| Symptoms/effects after eye contact | : Serious damage to eyes. |
| Symptoms/effects after ingestion | : Burns. |

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

Pullulanase/Limit-Dextrinase Assay Kit (PullG6 Method) (Bottle 3)

Safety Data Sheet

according to Regulation (EU) 2015/830

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Do not breathe spray, mist.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Do not breathe spray, mist. Wear personal protective equipment.

Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store locked up. Store in a well-ventilated place. Keep cool.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| sodium azide (26628-22-8) | | |
|---------------------------|---------------------------------|---------------------------------|
| EU | Local name | Sodium azide |
| EU | IOELV TWA (mg/m ³) | 0.1 mg/m ³ |
| EU | IOELV STEL (mg/m ³) | 0.3 mg/m ³ |
| EU | Notes | Skin |
| EU | Regulatory reference | COMMISSION DIRECTIVE 2000/39/EC |

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Hand protection:

Protective gloves

| Type | Material | Permeation | Thickness (mm) | Penetration | Standard |
|-------------------|----------------------|------------------|----------------|-------------|----------|
| Disposable gloves | Nitrile rubber (NBR) | 2 (> 30 minutes) | | 1 (< 4.0) | EN 374 |

Eye protection:

Safety glasses

| Type | Use | Characteristics | Standard |
|----------------|---------|-------------------|----------|
| Safety glasses | Droplet | With side shields | EN 174 |

Pullulanase/Limit-Dextrinase Assay Kit (PullG6 Method) (Bottle 3)

Safety Data Sheet

according to Regulation (EU) 2015/830

Skin and body protection:

Wear suitable protective clothing

| Type | Standard |
|----------|----------|
| Lab coat | |

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

| Device | Filter type | Condition | Standard |
|-----------|-------------|---------------------------------|----------------|
| Dust mask | Type P1 | Protection for Liquid particles | EN 143, EN 149 |



Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|--|---------------------|
| Physical state | : Liquid |
| Colour | : Colourless. |
| Odour | : None. |
| Odour threshold | : No data available |
| pH | : 5 |
| Relative evaporation rate (butylacetate=1) | : No data available |
| Melting point | : Not applicable |
| Freezing point | : No data available |
| Boiling point | : No data available |
| Flash point | : No data available |
| Auto-ignition temperature | : No data available |
| Decomposition temperature | : No data available |
| Flammability (solid, gas) | : Not applicable |
| Vapour pressure | : No data available |
| Relative vapour density at 20 °C | : No data available |
| Relative density | : No data available |
| Solubility | : Soluble in water. |
| Log Pow | : No data available |
| Viscosity, kinematic | : No data available |
| Viscosity, dynamic | : No data available |
| Explosive properties | : No data available |
| Oxidising properties | : No data available |
| Explosive limits | : |

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

Pullulanase/Limit-Dextrinase Assay Kit (PullG6 Method) (Bottle 3)

Safety Data Sheet

according to Regulation (EU) 2015/830

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

| | |
|-----------------------------------|---|
| Acute toxicity (oral) | : Not classified |
| Acute toxicity (dermal) | : Not classified |
| Acute toxicity (inhalation) | : Not classified |
| Skin corrosion/irritation | : Causes skin irritation. pH: 5 |
| Serious eye damage/irritation | : Causes serious eye irritation. pH: 5 |
| Respiratory or skin sensitisation | : Not classified |
| Germ cell mutagenicity | : Not classified |
| Carcinogenicity | : Not classified |
| Reproductive toxicity | : Not classified |
| STOT-single exposure | : Not classified |
| STOT-repeated exposure | : Not classified |
| Aspiration hazard | : Not classified |

SECTION 12: Ecological information

12.1. Toxicity

| | |
|--------------------------|---|
| Ecology - general | : Before neutralisation, the product may represent a danger to aquatic organisms. |
| Acute aquatic toxicity | : Not classified |
| Chronic aquatic toxicity | : Not classified |

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

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

| ADR | IATA |
|---|----------------|
| 14.1. UN number | |
| Not applicable | Not applicable |
| 14.2. UN proper shipping name | |
| Not applicable | Not applicable |
| 14.3. Transport hazard class(es) | |
| Not applicable | Not applicable |
| 14.4. Packing group | |
| Not applicable | Not applicable |

Pullulanase/Limit-Dextrinase Assay Kit (PullG6 Method) (Bottle 3)

Safety Data Sheet

according to Regulation (EU) 2015/830

| ADR | IATA |
|--|----------------|
| 14.5. Environmental hazards | |
| Not applicable | Not applicable |
| No supplementary information available | |

14.6. Special precautions for user

- Overland transport

Not applicable

- Air transport

Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

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

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

| | |
|--|---|
| 3. Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008 | acetic acid ... % |
| 3(a) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F | acetic acid ... % |
| 3(b) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10 | Pullulanase/Limit-Dextrinase Assay Kit (PullG6 Method) (Bottle 3) - acetic acid ... % |
| 40. Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not. | acetic acid ... % |

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of H- and EUH-statements:

| | |
|---------------------|---|
| Acute Tox. 2 (Oral) | Acute toxicity (oral), Category 2 |
| Aquatic Acute 1 | Hazardous to the aquatic environment — Acute Hazard, Category 1 |
| Aquatic Chronic 1 | Hazardous to the aquatic environment — Chronic Hazard, Category 1 |
| Flam. Liq. 3 | Flammable liquids, Category 3 |
| Skin Corr. 1A | Skin corrosion/irritation, Category 1A |
| H226 | Flammable liquid and vapour. |
| H300 | Fatal if swallowed. |
| H314 | Causes severe skin burns and eye damage. |
| H315 | Causes skin irritation. |
| H319 | Causes serious eye irritation |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |

Pullulanase/Limit-Dextrinase Assay Kit (PullG6 Method) (Bottle 3)

Safety Data Sheet

according to Regulation (EU) 2015/830

| | |
|--------|--|
| EUH032 | Contact with acids liberates very toxic gas. |
|--------|--|

SDS EU (REACH Annex II)

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.



Pullulanase/Limit-Dextrinase Assay Kit (PullG6 Method) (Bottle 2)

Safety Data Sheet

according to Regulation (EU) 2015/830

Date of issue: 10/02/2015

Revision date: 12/10/2017

Supersedes: 14/03/2017

Version: 1.2

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

1.1. Product identifier

Product form : Mixture
Product name : Pullulanase/Limit-Dextrinase Assay Kit (PullG6 Method) (Bottle 2)
Product code : K-PullG6 (Bottle 2)

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

1.2.1. Relevant identified uses

Main use category : Professional use
Use of the substance/mixture : Use as laboratory reagent

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Manufacturer

Megazyme
Bray Business Park
A98 YV29 Bray - Ireland
T +353 12861220 - F +353 12861264
cs@megazyme.com - www.megazyme.com

1.4. Emergency telephone number

Emergency number : +353 12861220 [9 am to 5 pm GMT - Monday to Friday]

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Not classified

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

EUH-statements : EUH032 - Contact with acids liberates very toxic gas.

Labelling according to: exemption for inner packaging where the contents do not exceed 10ml

No labelling required

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

This mixture does not contain any substances to be mentioned according to the criteria of section 3.2 of REACH annex II

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : Wash skin with plenty of water.
First-aid measures after eye contact : Rinse eyes with water as a precaution.
First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

Pullulanase/Limit-Dextrinase Assay Kit (PullG6 Method) (Bottle 2)

Safety Data Sheet

according to Regulation (EU) 2015/830

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

No additional information available

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Hand protection:

Protective gloves

| Type | Material | Permeation | Thickness (mm) | Penetration | Standard |
|-------------------|----------------------|------------------|----------------|-------------|----------|
| Disposable gloves | Nitrile rubber (NBR) | 2 (> 30 minutes) | | 1 (< 4.0) | EN 374 |

Eye protection:

Safety glasses

Pullulanase/Limit-Dextrinase Assay Kit (PullG6 Method) (Bottle 2)

Safety Data Sheet

according to Regulation (EU) 2015/830

| Type | Use | Characteristics | Standard |
|----------------|---------|--------------------------|----------|
| Safety glasses | Droplet | clear, With side shields | EN 174 |

Skin and body protection:

Wear suitable protective clothing

| Type | Standard |
|----------|----------|
| Lab coat | |

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment



Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|--|---------------------|
| Physical state | : Liquid |
| Colour | : Colourless. |
| Odour | : None. |
| Odour threshold | : No data available |
| pH | : No data available |
| Relative evaporation rate (butylacetate=1) | : No data available |
| Melting point | : Not applicable |
| Freezing point | : No data available |
| Boiling point | : No data available |
| Flash point | : No data available |
| Auto-ignition temperature | : No data available |
| Decomposition temperature | : No data available |
| Flammability (solid, gas) | : Not applicable |
| Vapour pressure | : No data available |
| Relative vapour density at 20 °C | : No data available |
| Relative density | : No data available |
| Solubility | : Soluble in water. |
| Log Pow | : No data available |
| Viscosity, kinematic | : No data available |
| Viscosity, dynamic | : No data available |
| Explosive properties | : No data available |
| Oxidising properties | : No data available |
| Explosive limits | : |

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

Pullulanase/Limit-Dextrinase Assay Kit (PullG6 Method) (Bottle 2)

Safety Data Sheet

according to Regulation (EU) 2015/830

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

| | |
|-----------------------------------|------------------|
| Acute toxicity (oral) | : Not classified |
| Acute toxicity (dermal) | : Not classified |
| Acute toxicity (inhalation) | : Not classified |
| Skin corrosion/irritation | : Not classified |
| Serious eye damage/irritation | : Not classified |
| Respiratory or skin sensitisation | : Not classified |
| Germ cell mutagenicity | : Not classified |
| Carcinogenicity | : Not classified |
| Reproductive toxicity | : Not classified |
| STOT-single exposure | : Not classified |
| STOT-repeated exposure | : Not classified |
| Aspiration hazard | : Not classified |

SECTION 12: Ecological information

12.1. Toxicity

| | |
|--------------------------|---|
| Ecology - general | : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment. |
| Acute aquatic toxicity | : Not classified |
| Chronic aquatic toxicity | : Not classified |

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

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

| ADR | IATA |
|---|----------------|
| 14.1. UN number | |
| Not applicable | Not applicable |
| 14.2. UN proper shipping name | |
| Not applicable | Not applicable |
| 14.3. Transport hazard class(es) | |
| Not applicable | Not applicable |
| 14.4. Packing group | |
| Not applicable | Not applicable |
| 14.5. Environmental hazards | |
| Not applicable | Not applicable |

Pullulanase/Limit-Dextrinase Assay Kit (PullG6 Method) (Bottle 2)

Safety Data Sheet

according to Regulation (EU) 2015/830

| ADR | IATA |
|--|------|
| No supplementary information available | |

14.6. Special precautions for user

- Overland transport

Not applicable

- Air transport

Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

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

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of H- and EUH-statements:

| | |
|--------|--|
| EUH032 | Contact with acids liberates very toxic gas. |
|--------|--|

SDS EU (REACH Annex II)

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.



Pullulanase/Limit-Dextrinase Assay Kit (PullG6 Method) (Bottle 1)

Safety Data Sheet

according to Regulation (EU) 2015/830

Date of issue: 10/02/2015

Revision date: 24/01/2019

Supersedes: 12/10/2017

Version: 1.3

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

1.1. Product identifier

Product form : Mixture
Product name : Pullulanase/Limit-Dextrinase Assay Kit (PullG6 Method) (Bottle 1)
Product code : K-PullG6 (Bottle 1)

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

1.2.1. Relevant identified uses

Main use category : Professional use
Use of the substance/mixture : Use as laboratory reagent

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Manufacturer

Megazyme
Bray Business Park
A98 YV29 Bray - Ireland
T +353 12861220 - F +353 12861264
cs@megazyme.com - www.megazyme.com

1.4. Emergency telephone number

Emergency number : +353 12861220 [9 am to 5 pm GMT - Monday to Friday]

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Acute toxicity (oral), Category 3 H301
Respiratory sensitisation, Category 1 H334
Hazardous to the aquatic environment — Chronic Hazard, Category 2 H411
Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

Toxic if swallowed. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Toxic to aquatic life with long lasting effects.

2.2. Label elements

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

Hazard pictograms (CLP) :



GHS06



GHS08



GHS09

Signal word (CLP) : Danger
Hazardous ingredients : sodium azide; glucosidase, β -; Glucosidase (alpha), maltase
Hazard statements (CLP) : H301 - Toxic if swallowed.
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H411 - Toxic to aquatic life with long lasting effects.
Precautionary statements (CLP) : P261 - Avoid breathing dust.
P264 - Wash hands thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P273 - Avoid release to the environment.
P284 - [In case of inadequate ventilation] wear respiratory protection.
P301+P310 - IF SWALLOWED: Immediately call a doctor
EUH-statements : EUH032 - Contact with acids liberates very toxic gas.

Pullulanase/Limit-Dextrinase Assay Kit (PullG6 Method) (Bottle 1)

Safety Data Sheet

according to Regulation (EU) 2015/830

Labelling according to: exemption for inner packaging where the contents do not exceed 10ml

Hazard pictograms (CLP) :



GHS06

GHS08

Hazardous ingredients : sodium azide; glucosidase, β -; Glucosidase (alpha), maltase

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|------------------------------|---|--------|---|
| glucosidase, β - | (CAS-No.) 9001-22-3 (EC-No.) 232-589-7 (EC Index-No.) 647-001-00-8 | 5 - 10 | Resp. Sens. 1, H334 |
| Glucosidase (alpha), maltase | (CAS-No.) 9001-42-7 (EC-No.) 232-604-7 | 5 - 10 | Resp. Sens. 1, H334 |
| sodium azide | (CAS-No.) 26628-22-8 (EC-No.) 247-852-1 (EC Index-No.) 011-004-00-7 | 1 - 5 | Acute Tox. 2 (Oral), H300 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 |

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Call a physician immediately.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a poison center or a doctor.
First-aid measures after skin contact : Wash skin with plenty of water.
First-aid measures after eye contact : Rinse eyes with water as a precaution.
First-aid measures after ingestion : Rinse mouth. Call a physician immediately.

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

Symptoms/effects after inhalation : May cause allergy or asthma symptoms or breathing difficulties if inhaled.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid breathing dust/fume/gas/mist/vapours/spray.

Pullulanase/Limit-Dextrinase Assay Kit (PullG6 Method) (Bottle 1)

Safety Data Sheet

according to Regulation (EU) 2015/830

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.
Methods for cleaning up : Mechanically recover the product.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment. Avoid breathing dust/fume/gas/mist/vapours/spray.
Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store locked up. Store in a well-ventilated place. Keep cool.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| sodium azide (26628-22-8) | | |
|---------------------------|---------------------------------|---------------------------------|
| EU | Local name | Sodium azide |
| EU | IOELV TWA (mg/m ³) | 0.1 mg/m ³ |
| EU | IOELV STEL (mg/m ³) | 0.3 mg/m ³ |
| EU | Notes | Skin |
| EU | Regulatory reference | COMMISSION DIRECTIVE 2000/39/EC |

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Hand protection:

Protective gloves

| Type | Material | Permeation | Thickness (mm) | Penetration | Standard |
|-------------------|----------------------|------------------|----------------|-------------|----------|
| Disposable gloves | Nitrile rubber (NBR) | 2 (> 30 minutes) | | 1 (< 4.0) | EN 374 |

Eye protection:

Safety glasses

| Type | Use | Characteristics | Standard |
|----------------|------|-------------------|----------|
| Safety glasses | Dust | With side shields | EN 174 |

Skin and body protection:

Wear suitable protective clothing

| Type | Standard |
|----------|----------|
| Lab coat | |

Respiratory protection:

[In case of inadequate ventilation] wear respiratory protection.

| Device | Filter type | Condition | Standard |
|-----------|-------------|-----------------|----------------|
| Dust mask | Type P1 | Dust protection | EN 143, EN 149 |

Pullulanase/Limit-Dextrinase Assay Kit (PullG6 Method) (Bottle 1)

Safety Data Sheet

according to Regulation (EU) 2015/830



Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|--|---------------------|
| Physical state | : Solid |
| Colour | : white. |
| Odour | : None. |
| Odour threshold | : No data available |
| pH | : No data available |
| Relative evaporation rate (butylacetate=1) | : No data available |
| Melting point | : No data available |
| Freezing point | : Not applicable |
| Boiling point | : No data available |
| Flash point | : Not applicable |
| Auto-ignition temperature | : Not applicable |
| Decomposition temperature | : No data available |
| Flammability (solid, gas) | : Non flammable. |
| Vapour pressure | : No data available |
| Relative vapour density at 20 °C | : No data available |
| Relative density | : Not applicable |
| Solubility | : Soluble in water. |
| Log Pow | : No data available |
| Viscosity, kinematic | : Not applicable |
| Viscosity, dynamic | : No data available |
| Explosive properties | : No data available |
| Oxidising properties | : No data available |
| Explosive limits | : Not applicable |

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Contact with acids liberates very toxic gas.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

Acids.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

| | |
|-----------------------------|-----------------------------|
| Acute toxicity (oral) | : Oral: Toxic if swallowed. |
| Acute toxicity (dermal) | : Not classified |
| Acute toxicity (inhalation) | : Not classified |

Pullulanase/Limit-Dextrinase Assay Kit (PullG6 Method) (Bottle 1)

Safety Data Sheet

according to Regulation (EU) 2015/830

| | |
|----------------|---------------------------------|
| ATE CLP (oral) | 192.3076923077 mg/kg bodyweight |
|----------------|---------------------------------|

| | |
|-----------------------------------|--|
| Skin corrosion/irritation | : Not classified |
| Serious eye damage/irritation | : Not classified |
| Respiratory or skin sensitisation | : May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| Germ cell mutagenicity | : Not classified |
| Carcinogenicity | : Not classified |
| Reproductive toxicity | : Not classified |
| STOT-single exposure | : Not classified |
| STOT-repeated exposure | : Not classified |
| Aspiration hazard | : Not classified |

SECTION 12: Ecological information

12.1. Toxicity

| | |
|--------------------------|---|
| Ecology - general | : Toxic to aquatic life with long lasting effects. Toxic to aquatic life. |
| Acute aquatic toxicity | : Not classified |
| Chronic aquatic toxicity | : Toxic to aquatic life with long lasting effects. |

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

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

| ADR | IATA |
|---|----------------|
| 14.1. UN number | |
| Not applicable | Not applicable |
| 14.2. UN proper shipping name | |
| Not applicable | Not applicable |
| 14.3. Transport hazard class(es) | |
| Not applicable | Not applicable |
| 14.4. Packing group | |
| Not applicable | Not applicable |
| 14.5. Environmental hazards | |
| Not applicable | Not applicable |
| No supplementary information available | |

14.6. Special precautions for user

- Overland transport

Not applicable

- Air transport

Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

Pullulanase/Limit-Dextrinase Assay Kit (PullG6 Method) (Bottle 1)

Safety Data Sheet

according to Regulation (EU) 2015/830

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Full text of H- and EUH-statements:

| | |
|---------------------|--|
| Acute Tox. 2 (Oral) | Acute toxicity (oral), Category 2 |
| Aquatic Acute 1 | Hazardous to the aquatic environment — Acute Hazard, Category 1 |
| Aquatic Chronic 1 | Hazardous to the aquatic environment — Chronic Hazard, Category 1 |
| Resp. Sens. 1 | Respiratory sensitisation, Category 1 |
| H300 | Fatal if swallowed. |
| H301 | Toxic if swallowed. |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |
| H411 | Toxic to aquatic life with long lasting effects. |
| EUH032 | Contact with acids liberates very toxic gas. |

SDS EU (REACH Annex II)

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.