Kit Name: AdvanceBio O-Glycanase

Kit PN: GK80090

This product is a multi-level kit, composed of the following modules and individual chemical components:

Kit Components

<table>
<thead>
<tr>
<th>Kit Component Part Number</th>
<th>Kit Component Name</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>GK80090</td>
<td>AdvanceBio O-Glycanase, 50 mU</td>
<td>1 Vial</td>
</tr>
<tr>
<td>WS0059</td>
<td>5x Reaction Buffer A, 1 ml</td>
<td>1 Vial</td>
</tr>
</tbody>
</table>

SDSs for each component follow this cover sheet.

Transportation Information for the Kit:

Proper Shipping Names:

<table>
<thead>
<tr>
<th>DOT</th>
<th>IATA/ICAO</th>
<th>China</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Regulated</td>
<td>Not Regulated</td>
<td>Not Regulated</td>
</tr>
</tbody>
</table>
1 Identification

· Product identifier
  · Trade name: AdvanceBio O-Glycanase
  · Article number: GK80090

· Relevant identified uses of the substance or mixture and uses advised against
  · Application of the substance / the mixture: Reagents and Standards for Analytical Chemical Laboratory Use

· Details of the supplier of the safety data sheet
  · Manufacturer/Supplier:
    Agilent Technologies Australia Pty Ltd
    679 Springvale Road
    Mulgrave
    Victoria 3170, Australia
  · Email: pdl-msds_author@agilent.com
  · Phone number: 1800 802 402
  · Emergency telephone number: CHEMTREC®: +(61)-290372994

2 Hazard(s) Identification

· Classification of the substance or mixture
  
  GHS07
  Skin Sens. 1 H317 May cause an allergic skin reaction.

· Label elements
  · GHS label elements: The product is classified and labelled according to the Globally Harmonised System (GHS).
  · Hazard pictograms
    
    GHS07

· Signal word: Warning

· Hazard statements
  May cause an allergic skin reaction.

· Precautionary statements
  Avoid breathing dust/fume/gas/mist/vapours/spray.
  Wash thoroughly after handling.
  Avoid release to the environment.
  Wear protective gloves/protective clothing/eye protection/face protection.
  Wear respiratory protection.
  IF SWALLOWED: Call a doctor if you feel unwell.
  IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
  IF ON SKIN: Wash with plenty of soap and water.
  IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
  IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  If skin irritation or rash occurs: Get medical advice/attention.
  Collect spillage.

(Contd. on page 2)
Safety Data Sheet
according to WHS Regulations

Revision Date: 29.04.2019  Issue Date: 29.04.2019

Trade name: AdvanceBio O-Glycanase

Store in accordance with local/regional/national/international regulations.
Store in a closed container.
Dispose of contents/container in accordance with local/regional/national/international regulations.

Other hazards
Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

3 Composition and Information on Ingredients

Chemical characterisation: Mixtures
Description: Mixture of substances listed below with nonhazardous additions.
Dangerous components: Void
Additional information: For the wording of the listed hazard phrases refer to section 16.

4 First Aid Measures

Description of first aid measures
After inhalation: Supply fresh air; consult doctor in case of complaints.
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 symptoms persist consult doctor.
Information for doctor:
Most important symptoms and effects, both acute and delayed 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: Use fire extinguishing methods suitable to surrounding conditions.
Special hazards arising from the substance or mixture No further relevant information available.
Advice for firefighters
Protective equipment: No special measures required.

6 Accidental Release Measures

Personal precautions, protective equipment and emergency procedures
Wear protective gloves / eye protection / face protection.
Environmental precautions: No special measures required.
Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Reference to other sections
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

(Contd. on page 3)
7 Handling and Storage

- Handling:
  - Precautions for safe handling: No special precautions are necessary if used correctly.
  - Information about fire - and explosion protection: No special measures required.

- 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 and personal protection

- Additional information about design of technical facilities: No further data; see item 7.

- Control parameters

- Ingredients 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 valid during the making were used as basis.

- Exposure controls

- Personal protective equipment:

- General protective and hygienic measures: Wash hands before breaks and at the end of work.

- Respiratory protection: Not required.

- Protection of hands:
  - The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
  - Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
  - Material of gloves: Wear suitable gloves.
  - Penetration time of glove material: The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- Eye protection: Wear eye protection / face protection.

9 Physical and Chemical Properties

- Information on basic physical and chemical properties

- General Information

- Appearance:
  - Form: Liquid
  - Colour: Clear
  - Odour: Characteristic
  - Odour threshold: Not determined.

- pH-value at 20 °C: 7.5

- Change in condition
  - Melting point/freezing point: 0 °C
  - Initial boiling point and boiling range: 100 °C

- Flash point: Not applicable.
### 48.1.25 Safety Data Sheet (Contd. of page 3)

**Trade name:** AdvanceBio O-Glycanase

- **Flammability (solid, gas):** Not applicable.
- **Decomposition temperature:** Not determined.
- **Auto-ignition temperature:** Product is not selfigniting.
- **Explosive properties:** Product does not present an explosion hazard.
  - **Explosion limits:**
    - Lower: Not determined.
    - Upper: Not determined.
  - **Vapour pressure at 20 °C:** 23 hPa
  - **Density:** Not determined.
  - **Relative density:** Not determined.
  - **Vapour density:** Not determined.
  - **Evaporation rate:** Not determined.
- **Solubility in / Miscibility with water:** Not miscible or difficult to mix.
- **Partition coefficient: n-octanol/water:** Not determined.
- **Viscosity:**
  - Dynamic at 20 °C: 0.952 mPas
  - Kinematic: Not determined.
- **Solvent content:**
  - Water: 99.5 %
  - Solids content: 0.1 %
- **Other information:** 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**
    - **Primary irritant effect:**
    - **Skin corrosion/irritation** May be harmful in contact with skin.
    - **Serious eye damage/irritation** No irritating effect.
    - **Respiratory or skin sensitisation** No sensitising effects known.
12 Ecological Information

- Toxicity
  - Aquatic toxicity: No further relevant information available.
  - Persistence and degradability: No further relevant information available.
- Behaviour in environmental systems:
  - Bioaccumulative potential: No further relevant information available.
  - Mobility in soil: No further relevant information available.
- Additional ecological information:
  - General notes: Not hazardous for water.
  - Results of PBT and vPvB assessment
    - PBT: Not applicable.
    - vPvB: Not applicable.
- Other adverse effects: No further relevant information available.

13 Disposal considerations

- Waste treatment methods
  - Recommendation: Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- Uncleaned packaging:
  - Recommendation: Disposal must be made according to official regulations.

14 Transport information

- UN-Number
  - ADG, ADN, IMDG, IATA: not regulated
- UN proper shipping name
  - ADG, ADN, IMDG, IATA: not regulated
- Transport hazard class(es)
  - ADG, ADN, IMDG, IATA: not regulated
  - Class: not regulated
- Packing group
  - ADG, IMDG, IATA: not regulated
- Environmental hazards:
  - Not applicable.
- Special precautions for user
  - Not applicable.
- Transport in bulk according to Annex II of Marpol and the IBC Code
  - Not applicable.
- UN "Model Regulation": not regulated
15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
  - Australian Inventory of Chemical Substances
    - 1185-53-1 2-amino-2-(hydroxymethyl)propane-1,3-diolhydrochloride
    - 7647-14-5 sodium chloride
    - 7732-18-5 water, distilled, conductivity or of similar purity
  - Standard for the Uniform Scheduling of Medicines and Poisons
    None of the ingredients is listed.
  - GHS label elements The product is classified and labelled according to the Globally Harmonised System (GHS).
  - Hazard pictograms
    - GHS07
- Signal word Warning
- Hazard statements
  - May cause an allergic skin reaction.
- Precautionary statements
  - Avoid breathing dust/fume/gas/mist/vapours/spray.
  - Wash thoroughly after handling.
  - Avoid release to the environment.
  - Wear protective gloves/protective clothing/eye protection/face protection.
  - Wear respiratory protection.
  - IF SWALLOWED: Call a doctor if you feel unwell.
  - IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
  - IF ON SKIN: Wash with plenty of soap and water.
  - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
  - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  - If skin irritation or rash occurs: Get medical advice/attention.
  - Collect spillage.
  - Store in accordance with local/regional/national/international regulations.
  - Store in a closed container.
  - Dispose of contents/container in accordance with local/regional/national/international regulations.
- Directive 2012/18/EU
- Named dangerous substances - ANNEX I None of the ingredients is listed.
- Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

The information contained in this document is based on Agilent’s state of knowledge at the time of preparation. No warranty as to its accurateness, completeness or suitability for a particular purpose is expressed or implied.

- Abbreviations and acronyms:
  - Skin Sens. 1: Skin sensitisation – Category 1
1 Identification

· Product identifier
  · Trade name: 5x Reaction Buffer A
  · Article number: WS0059

· Relevant identified uses of the substance or mixture and uses advised against
  · Application of the substance / the mixture Reagents and Standards for Analytical Chemical Laboratory Use

· Details of the supplier of the safety data sheet
  · Manufacturer/Supplier:
    Agilent Technologies Australia Pty Ltd
    679 Springvale Road
    Mulgrave
    Victoria 3170, Australia

  · Further information obtainable from:
    Agilent Quality Assurance

  · Emergency telephone number: CHEMTREC®: +(61)-290372994

2 Hazard(s) Identification

· Classification of the substance or mixture
  The product is not classified, according to the Globally Harmonised System (GHS).

· Label elements
  · GHS label elements Void
  · Hazard pictograms Void
  · Signal word Void
  · Hazard statements Void

· Precautionary statements
  Wash thoroughly after handling.
  Wear protective gloves/protective clothing/eye protection/face protection.
  IF SWALLOWED: Call a doctor if you feel unwell.
  IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
  IF ON SKIN: Wash with plenty of soap and water.
  IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
  IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  Store in a closed container.
  Store away from other materials.
  Dispose of contents/container in accordance with local/regional/national/international regulations.

· Other hazards

· Results of PBT and vPvB assessment
  · PBT: Not applicable.
  · vPvB: Not applicable.

3 Composition and Information on Ingredients

· Chemical characterisation: Mixtures
· Description: Mixture of substances listed below with nonhazardous additions.
· Dangerous components: Void

(Contd. on page 2)
Trade name: 5x Reaction Buffer A

4 First Aid Measures

- Description of first aid measures
  - General information: No special measures required.
  - After inhalation: Supply fresh air; consult doctor in case of complaints.
  - 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 symptoms persist consult doctor.
  - Information for doctor:
    - Most important symptoms and effects, both acute and delayed: 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: Use fire extinguishing methods suitable to surrounding conditions.
  - Special hazards arising from the substance or mixture: No further relevant information available.
  - Advice for firefighters
    - Protective equipment: No special measures required.

6 Accidental Release Measures

- Personal precautions, protective equipment and emergency procedures
  - Wear protective gloves / eye protection / face protection.
- Environmental precautions:
  - Dilute with plenty of water.
  - Do not allow to enter sewers/ surface or ground 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
  - See Section 7 for information on safe handling.
  - See Section 8 for information on personal protection equipment.
  - See Section 13 for disposal information.

7 Handling and Storage

- Handling:
  - Precautions for safe handling: Wear protective gloves / eye protection / face protection.
  - Information about fire - and explosion protection: No special measures required.
- 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.
8 Exposure controls and personal protection

- Additional information about design of technical facilities: No further data; see item 7.

- Control parameters
  - Ingredients 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 valid during the making were used as basis.

- Exposure controls
  - Personal protective equipment:
    - General protective and hygienic measures: The usual precautionary measures are to be adhered to when handling chemicals.
    - Respiratory protection: Not required.
    - Protection of hands:
      - Material of gloves: Wear suitable gloves.
      - Penetration time of glove material: The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
    - Eye protection: Wear eye protection / face protection.

9 Physical and Chemical Properties

- Information on basic physical and chemical properties
  - General Information
    - Appearance:
      - Form: Liquid
      - Colour: Colourless
      - Odour: Characteristic
      - Odour threshold: Not determined.
    - pH-value at 20 °C: 7
  - Change in condition
    - Melting point/freezing point: 0 °C
    - Initial boiling point and boiling range: 100 °C
  - Flash point: Not applicable.
  - Flammability (solid, gas): Not applicable.
  - Decomposition temperature: Not determined.
  - Auto-ignition temperature: Product is not selfigniting.
  - Explosive properties: Product does not present an explosion hazard.

- Explosion limits:
  - Lower: Not determined.
  - Upper: Not determined.

- Vapour pressure at 20 °C: 23 hPa

- Density: Not determined.
Safety Data Sheet
according to WHS Regulations

Trade name: 5x Reaction Buffer A

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relative density</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Vapour density</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Solubility in / Miscibility with water</td>
<td>Fully miscible.</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Viscosity:</td>
<td></td>
</tr>
<tr>
<td>Dynamic</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Kinematic</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Solvent content:</td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td>97.0 %</td>
</tr>
<tr>
<td>Solids content</td>
<td>5.0 %</td>
</tr>
<tr>
<td>Other information:</td>
<td>No further relevant information available.</td>
</tr>
</tbody>
</table>

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:
    - Primary irritant effect: May be harmful in contact with skin.
    - Serious eye damage/irritation: No irritating effect.
    - Respiratory or skin sensitisation: No sensitising effects known.
- Additional toxicological information:
  - The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.
  - When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

12 Ecological Information

- Toxicity:
  - Aquatic toxicity: No further relevant information available.
  - Persistence and degradability: No further relevant information available.
- Behaviour in environmental systems:
  - Bioaccumulative potential: No further relevant information available.
- Mobility in soil: No further relevant information available.
Trade name: 5x Reaction Buffer A

- Additional ecological information:
  - General notes: Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water. Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
  - Results of PBT and vPvB assessment
    - PBT: Not applicable.
    - vPvB: Not applicable.
  - Other adverse effects No further relevant information available.

13 Disposal considerations

- Waste treatment methods
  - Recommendation Dispose of contents/container in accordance with local/regional/national/international regulations.
- Uncleaned packaging:
  - Recommendation: Disposal must be made according to official regulations.
  - Recommended cleansing agents: Water, if necessary together with cleansing agents.

14 Transport information

- UN-Number
  - ADG, ADN, IMDG, IATA not regulated
- UN proper shipping name
  - ADG, ADN, IMDG, IATA not regulated
- Transport hazard class(es)
  - ADG, ADN, IMDG, IATA not regulated
  - Class not regulated
- Packing group
  - ADG, IMDG, IATA not regulated
- Environmental hazards: Not applicable.
- Special precautions for user Not applicable.
- Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable.
- UN "Model Regulation": not regulated

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
  - Australian Inventory of Chemical Substances
    - All ingredients are listed.
  - Standard for the Uniform Scheduling of Medicines and Poisons
    - 7558-80-7 Monosodium phosphate S4
  - GHS label elements Void

(Contd. on page 6)
Trade name: 5x Reaction Buffer A

· Hazard pictograms Void
· Signal word Void
· Hazard statements Void
· Precautionary statements
  Wash thoroughly after handling.
  Wear protective gloves/protective clothing/eye protection/face protection.
  IF SWALLOWED: Call a doctor if you feel unwell.
  IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
  IF ON SKIN: Wash with plenty of soap and water.
  IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
  IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  Store in a closed container.
  Store away from other materials.
  Dispose of contents/container in accordance with local/regional/national/international regulations.

· Directive 2012/18/EU
· Named dangerous substances - ANNEX I None of the ingredients is listed.
· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information
The information contained in this document is based on Agilent’s state of knowledge at the time of preparation. No warranty as to its accurateness, completeness or suitability for a particular purpose is expressed or implied.