Kit Name: **GlykoPrep Rapid N-Glycan Prep with APTS, 96-ct**

Kit PN: **GP96NG-APTS**

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

### Kit Components

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Module Name</th>
<th>Kit Component Name</th>
<th>Kit Component Part Number</th>
<th>Kit Component Name</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>GS96-RX</td>
<td>GlykoPrep Digestion Module, 96-ct</td>
<td>WS0256 Immobilization Reagent Set</td>
<td>WS0226 Denaturation Reagent, 30 ml</td>
<td>1 bottle</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>WS0255 Blocking Reagent, 6 ml</td>
<td>1 bottle</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>WS0259 GlykoPrep Digestion Reagent Set, 96-ct</td>
<td>WS0229 Finishing Reagent, 1 ml</td>
<td>2 bottles</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>WS0276 25x Digestion Buffer, 0.7 ml</td>
<td>1 vial</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>WS0278 AdvanceBio N-Glycanase, 300 µl</td>
<td>1 vial</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>WS0253 GlykoPrep Digestion (RX) Cartridges</td>
<td>1 each</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GS96-APTS</td>
<td>GlykoPrep APTS Labeling Module, 96-ct</td>
<td>WS0295 APTS Catalyst, 325 µl</td>
<td>1 vial</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>WS0299 APTS Solution, 130 µl</td>
<td>1 vial</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>WS0300 Reductant Solution, 325 µl</td>
<td>1 vial</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>MS1160 Aluminum Sealing Film*</td>
<td>4 each</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GS96-C2</td>
<td>GlykoPrep APTS Cleanup Module, 96-ct</td>
<td>WS0263 GlykoPrep Cleanup (CU) Cartridges</td>
<td>1 each</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>WS0301-GP 5x APTS Sample Load Buffer, 48 ml</td>
<td>1 bottle</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>MS1160 Aluminum Sealing Film*</td>
<td>2 each</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* (Contains only hardware, contains no chemicals)

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>UN3082</td>
</tr>
</tbody>
</table>
1 Identification of the substance/mixture and of the company/undertaking

· Product identifier
· Trade name: Denaturation Reagent; Denaturation Reagent, 24-ct;
· Article number: WS0226, WS0226-24, WS0226-GP

· 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 Manufacturing GmbH & Co. KG
  Hewlett-Packard-Str. 8
  76337 Waldbronn
  Germany
  Void
· Email: pdl-msds_author@agilent.com
· Phone number: 0800 603 1000
· Emergency telephone number: CHEMTREC®: +(44)-870-8200418

2 Hazards identification

· Classification of the substance or mixture
· Classification according to Regulation (EC) No 1272/2008

GHS07

Acute Tox. 4 H302 Harmful if swallowed.
Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2 H319 Causes serious eye irritation.

· Label elements
· Labelling according to Regulation (EC) No 1272/2008
  The product is classified and labelled according to the CLP regulation.
· Hazard pictograms

GHS07

· Signal word Warning
· Hazard-determining components of labelling: guanidinium chloride
· Hazard statements
  H302 Harmful if swallowed.
  H315 Causes skin irritation.
  H319 Causes serious eye irritation.
· Precautionary statements
  P101 If medical advice is needed, have product container or label at hand.
  P102 Keep out of reach of children.

(Contd. on page 2)
Trade name: Denaturation Reagent; Denaturation Reagent, 24-ct;

P103 Read label before use.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312 IF SWALLOWED: Call a doctor if you feel unwell.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P420 Store separately.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Labelling of packages where the contents do not exceed 125 ml

Hazard pictograms

GHS07

Signal word Warning

Hazard-determining components of labelling:

- guanidinium chloride

Hazard statements

- H302 Harmful if swallowed.

Precautionary statements

- P101 If medical advice is needed, have product container or label at hand.
- P102 Keep out of reach of children.
- P103 Read label before use.
- P270 Do not eat, drink or smoke when using this product.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P301+P312 IF SWALLOWED: Call a doctor if you feel unwell.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P420 Store separately.
- P501 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/information on ingredients

Chemical characterisation: Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

| CAS: 50-01-1 | guanidinium chloride | Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319 | 57.3% |
| EINECS: 200-002-3 |

Additional information: For the wording of the listed hazard phrases refer to section 16.
4 First aid measures

· Description of first aid measures
· General information:
  Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
· After inhalation: In case of unconsciousness place patient stably in side position for transportation.
· After skin contact: Immediately wash with water and soap and rinse thoroughly.
· After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
· After swallowing: Call for a doctor immediately.
· 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 Firefighting 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: 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).
  Dispose contaminated material as waste according to item 13.
  Ensure adequate ventilation.
· 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
  Ensure good ventilation/exhaustion at the workplace.
  Prevent formation of aerosols.
· 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: Keep container tightly sealed.
Trade name: Denaturation Reagent; Denaturation Reagent, 24-ct;

(Contd. of page 3)

8 Exposure controls/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:
    Keep away from foodstuffs, beverages and feed.
    Immediately remove all soiled and contaminated clothing
    Wash hands before breaks and at the end of work.
    Avoid contact with the eyes and skin.
  - Respiratory protection:
    In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
  - Protection of hands:

  Protective gloves

  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:

  Tightly sealed goggles

9 Physical and chemical properties

- Information on basic physical and chemical properties
- General Information
  - Appearance:
    - Form: Liquid
    - Colour: According to product specification
  - Odour:
    - Characteristic
  - Odour threshold:
    - Not determined.
- pH-value at 20 °C: 8.8

(Contd. on page 5)
Trade name: Denaturation Reagent; Denaturation Reagent, 24-ct;

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 at 20 °C: 0.839 g/cm³
  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: Not determined.
  Kinematic: Not determined.
· Solvent content:
  Water: 39.7 %
· Solids content: 59.0 %
· 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
    Harmful if swallowed.
Safety data sheet
according to 1907/2006/EC, Article 31

Trade name: Denaturation Reagent; Denaturation Reagent, 24-ct;

49.0
· LD/LC50 values relevant for classification:
  50-01-1 guanidinium chloride
  Oral [LD50] 475 mg/kg (rat)

· Primary irritant effect:
  · Skin corrosion/irritation
    Causes skin irritation.
  · Serious eye damage/irritation
    Causes serious eye irritation.
  · Respiratory or skin sensitisation
    Based on available data, the classification criteria are not met.
  · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
    · Germ cell mutagenicity
      Based on available data, the classification criteria are not met.
  · Carcinogenicity
    Based on available data, the classification criteria are not met.
  · Reproductive toxicity
    Based on available data, the classification criteria are not met.
  · STOT-single exposure
    Based on available data, the classification criteria are not met.
  · STOT-repeated exposure
    Based on available data, the classification criteria are not met.

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:
    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: 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
  · ADR, ADN, IMDG, IATA: not regulated

(Contd. on page 7)
Safety data sheet  
according to 1907/2006/EC, Article 31

Revision Date: 30.05.2019  
Issue Date: 24.04.2019

Trade name: Denaturation Reagent; Denaturation Reagent, 24-ct;

(Contd. of page 6)

<table>
<thead>
<tr>
<th>· UN proper shipping name</th>
<th>not regulated</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>· Transport hazard class(es)</th>
<th>not regulated</th>
</tr>
</thead>
<tbody>
<tr>
<td>· ADR, ADN, IMDG, IATA</td>
<td></td>
</tr>
<tr>
<td>· Class</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>· Packing group</th>
<th>not regulated</th>
</tr>
</thead>
<tbody>
<tr>
<td>· ADR, IMDG, IATA</td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>· Environmental hazards:</th>
<th>Not applicable.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>· Special precautions for user</th>
<th>Not applicable.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>· Transport in bulk according to Annex II of Marpol and the IBC Code</th>
<th>Not applicable.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>· UN &quot;Model Regulation&quot;:</th>
<th>not regulated</th>
</tr>
</thead>
</table>

15 Regulatory information

<table>
<thead>
<tr>
<th>· Safety, health and environmental regulations/legislation specific for the substance or mixture</th>
</tr>
</thead>
<tbody>
<tr>
<td>· Directive 2012/18/EU</td>
</tr>
<tr>
<td>· Named dangerous substances - ANNEX I None of the ingredients is listed.</td>
</tr>
<tr>
<td>· REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3</td>
</tr>
<tr>
<td>· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>· Relevant phrases</th>
</tr>
</thead>
<tbody>
<tr>
<td>H302 Harmful if swallowed.</td>
</tr>
<tr>
<td>H315 Causes skin irritation.</td>
</tr>
<tr>
<td>H319 Causes serious eye irritation.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>· Abbreviations and acronyms:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Tox. 4: Acute toxicity – Category 4</td>
</tr>
<tr>
<td>Skin Irrit. 2: Skin corrosion/irritation – Category 2</td>
</tr>
<tr>
<td>Eye Irrit. 2: Serious eye damage/eye irritation – Category 2</td>
</tr>
</tbody>
</table>
1 Identification of the substance/mixture and of the company/undertaking

· Product identifier
· Trade name: Finishing Reagent
· Article number: WS0229, WS0229-GP

· 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 Manufacturing GmbH & Co. KG
  Hewlett-Packard-Str. 8
  76337 Waldbronn
  Germany
· Email: pdl-msds_author@agilent.com
· Phone number: 0800 603 1000
· Emergency telephone number: CHEMTREC®: +(44)-870-8200418

2 Hazards identification

· Classification of the substance or mixture
· Classification according to Regulation (EC) No 1272/2008

GHS07

Skin Irrit. 2  H315  Causes skin irritation.
Eye Irrit. 2   H319  Causes serious eye irritation.
Skin Sens. 1  H317  May cause an allergic skin reaction.

· Label elements
· Labelling according to Regulation (EC) No 1272/2008
  The product is classified and labelled according to the CLP regulation.
· Hazard pictograms

GHS07

· Signal word: Warning
· Hazard statements
  H315 Causes skin irritation.
  H319 Causes serious eye irritation.
  H317 May cause an allergic skin reaction.
· Precautionary statements
  P101 If medical advice is needed, have product container or label at hand.
  P102 Keep out of reach of children.
  P103 Read label before use.
  P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
  P280 Wear protective gloves/protective clothing/eye protection/face protection.

(Contd. on page 2)
**Trade name:** Finishing Reagent

(Contd. of page 1)

- **P301+P312** IF SWALLOWED: Call a doctor if you feel unwell.
- **P305+P351+P338** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- **P401** Store in accordance with local/regional/national/international regulations.
- **P501** Dispose of contents/container in accordance with local/regional/national/international regulations.

* Labelling of packages where the contents do not exceed 125 ml

* **Hazard pictograms**

GHS07

- **Signal word** Warning
- **Hazard statements**
  
  H317 May cause an allergic skin reaction.

- **Precautionary statements**
  
  - P101 If medical advice is needed, have product container or label at hand.
  - P102 Keep out of reach of children.
  - P103 Read label before use.
  - P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
  - P280 Wear protective gloves/protective clothing/eye protection/face protection.
  - **P301+P312** IF SWALLOWED: Call a doctor if you feel unwell.
  - **P305+P351+P338** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  - **P401** Store in accordance with local/regional/national/international regulations.
  - **P501** 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/information on ingredients**

- **Chemical characterisation:** Mixtures

- **Description:** Mixture of substances listed below with nonhazardous additions.

* **Dangerous components:**

<table>
<thead>
<tr>
<th>CAS</th>
<th>Description</th>
<th>PBT</th>
<th>vPvB</th>
</tr>
</thead>
<tbody>
<tr>
<td>64-19-7</td>
<td>acetic acid</td>
<td>Flam. Liq. 3, H226; Skin Corr. 1A, H314; Acute Tox. 4, H312</td>
<td>10.0%</td>
</tr>
</tbody>
</table>

| EINECS: 200-580-7 | 10.0% | 10.0% |

- **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:** In case of unconsciousness place patient stably in side position for transportation.
  - **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
  - **After eye contact:** Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
  - **After swallowing:** If symptoms persist consult doctor.

- **Information for doctor:**

  - **Most important symptoms and effects, both acute and delayed** No further relevant information available.

(Contd. on page 3)
5 Firefighting 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).
  Ensure adequate ventilation.
· 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
  Ensure good ventilation/exhaustion at the workplace.
  Prevent formation of aerosols.
· 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: Keep container tightly sealed.
· Specific end use(s) No further relevant information available.

8 Exposure controls/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:

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>WEL</th>
<th>Short-term value</th>
<th>Long-term value</th>
</tr>
</thead>
<tbody>
<tr>
<td>64-19-7 acetic acid</td>
<td></td>
<td>50 mg/m³, 20 ppm</td>
<td>25 mg/m³, 10 ppm</td>
</tr>
</tbody>
</table>

(Contd. on page 4)
Trade name: Finishing Reagent

- Additional information: The lists valid during the making were used as basis.

- **Exposure controls**
  - **Personal protective equipment:**
    - **General protective and hygienic measures:**
      Keep away from foodstuffs, beverages and feed.
      Immediately remove all soiled and contaminated clothing.
      Wash hands before breaks and at the end of work.
      Avoid contact with the eyes and skin.
  - **Respiratory protection:**
    In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
  - **Protection of hands:**
    - Protective gloves
      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:**
    - Tightly sealed goggles

### 9 Physical and chemical properties

- **Information on basic physical and chemical properties**
  - **General Information**
    - **Appearance:**
      - Form: Liquid
      - Colour: Colourless
      - Odour: Pungent
  - **Odour threshold:** Not determined.
  - **pH-value:** Not determined.

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

- **Flash point:** Not applicable.

- **Flammability (solid, gas):** Not applicable.

- **Ignition temperature:** 485 °C

- **Decomposition temperature:** Not determined.

- **Auto-ignition temperature:** Product is not selfigniting.
Trade name: Finishing Reagent

(Contd. of page 4)

Explosive properties: Product does not present an explosion hazard.

- Explosion limits:
  - Lower: 4 Vol %
  - Upper: 17 Vol %

- Vapour pressure at 20 °C: 23 hPa

- Density at 20 °C: 1.00225 g/cm³
- Relative density: Not determined.
- Vapour density: Not determined.
- Evaporation rate: Not determined.

- Solubility in / Miscibility with water: Fully miscible.

- Partition coefficient: n-octanol/water: Not determined.

- Viscosity:
  - Dynamic at 20 °C: 0.952 mPas
  - Kinematic: Not determined.

- Solvent content:
  - Organic solvents: 10.0 %
  - Water: 90.0 %

- Solids content: 0.0 %
- 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: Based on available data, the classification criteria are not met.
- Primary irritant effect:
- Skin corrosion/irritation: Causes skin irritation.
- Serious eye damage/irritation: Causes serious eye irritation.
- Respiratory or skin sensitisation: May cause an allergic skin reaction.
- CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)
- Germ cell mutagenicity: Based on available data, the classification criteria are not met.
- Carcinogenicity: Based on available data, the classification criteria are not met.

(Contd. on page 6)
Trade name: Finishing Reagent

- Reproductive toxicity: Based on available data, the classification criteria are not met.
- STOT-single exposure: Based on available data, the classification criteria are not met.
- STOT-repeated exposure: Based on available data, the classification criteria are not met.
- Aspiration hazard: Based on available data, the classification criteria are not met.

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: 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: 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.
  - Recommended cleansing agents: Water, if necessary together with cleansing agents.

14 Transport information

- UN-Number
  - ADR, ADN, IMDG, IATA: not regulated
- UN proper shipping name
  - ADR, ADN, IMDG, IATA: not regulated
- Transport hazard class(es)
  - ADR, ADN, IMDG, IATA: not regulated
  - Class: not regulated
- Packing group
  - ADR, IMDG, IATA: not regulated
- Environmental hazards:
  - Not applicable.
Safety data sheet
according to 1907/2006/EC, Article 31

Trade name: Finishing Reagent

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<table>
<thead>
<tr>
<th>· Special precautions for user</th>
<th>Not applicable.</th>
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<tbody>
<tr>
<td>· Transport in bulk according to</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Annex II of Marpol and the IBC</td>
<td></td>
</tr>
<tr>
<td>Code</td>
<td></td>
</tr>
<tr>
<td>· UN &quot;Model Regulation&quot;:</td>
<td>not regulated</td>
</tr>
</tbody>
</table>

15 Regulatory information

· Safety, health and environmental regulations/legislation specific for the substance or mixture
  · Directive 2012/18/EU
  · Named dangerous substances - ANNEX I None of the ingredients is listed.
  · REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
  · 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.

· Relevant phrases
  H226 Flammable liquid and vapour.
  H312 Harmful in contact with skin.
  H314 Causes severe skin burns and eye damage.

· Abbreviations and acronyms:
  Flam. Liq. 3: Flammable liquids – Category 3
  Acute Tox. 4: Acute toxicity – Category 4
  Skin Corr. 1A: Skin corrosion/irritation – Category 1A
  Skin Irrit. 2: Skin corrosion/irritation – Category 2
  Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
  Skin Sens. 1: Skin sensitisation – Category 1
1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
  This product is considered an article. This Safety Data Sheet is written based on the encapsulated substance or mixture in this article.

- **Trade name:** GlykoPrep Digestion (RX) Cartridges
- **Article number:** WS0253

- **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 Manufacturing GmbH & Co. KG
    Hewlett-Packard-Str. 8
    76337 Waldbronn
    Germany
  - **Email:** pdl-msds_author@agilent.com
  - **Phone number:** 0800 603 1000
  - **Emergency telephone number:** CHEMTREC®: +(44)-870-8200418

2 Hazards identification

- **Classification of the substance or mixture**
  - **Classification according to Regulation (EC) No 1272/2008**
    The substance is not classified, according to the CLP regulation.
  - **Classification according to Directive 67/548/EEC or Directive 1999/45/EC** Not applicable.
  - **Information concerning particular hazards for human and environment:** Not applicable.

- **Additional information:**
  This article, when used under reasonable conditions and in accordance with the directions for use, should not present a health hazard. The substance or mixture is encapsulated in the article. Only if released due to use or processing of the article in a manner not in accordance with the product’s directions for use it may present potential health and safety hazards.

- **Label elements**
  - **Labelling according to EU guidelines:**
    Observe the general safety regulations when handling chemicals.
    The substance is not subject to classification according to EU lists and other sources of literature known to us.
  - **Other hazards**
    - **Results of PBT and vPvB assessment**
      - **PBT:** Not applicable.
      - **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterisation: Substances**
- **CAS No. Description**
  Modified Silica
- **Additional information:**
  This article, when used under reasonable conditions and in accordance with the directions for use, should not present a health hazard. The substance or mixture is encapsulated in the article. Only if released due to use or processing of the article in a manner not in accordance with the product’s directions for use it may present potential health and safety hazards.
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 Firefighting 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: Do not allow to enter sewers/ surface or ground water.
  - Methods and material for containment and cleaning up: Pick up mechanically.
- 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.
- Specific end use(s): No further relevant information available.

8 Exposure controls/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: Not required.

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:
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
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.

Penetration time of glove material
The exact breakthrough 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: Solid
Colour: According to product specification

Odour: Characteristic
Odour threshold: Not determined.

pH-value: Not applicable.

Change in condition
Melting point/freezing point: Undetermined.
Initial boiling point and boiling range: Undetermined.

Flash point: Not applicable.

Flammability (solid, gas): Product is not flammable.

Decomposition temperature: Not determined.

Auto-ignition temperature: Not determined.

Explosive properties: Product does not present an explosion hazard.

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

Vapour pressure: Not applicable.

Density: Not determined.
Relative density: Not determined.
Vapour density: Not applicable.
Evaporation rate: Not applicable.
Trade name: GlykoPrep Digestion (RX) Cartridges

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: Based on available data, the classification criteria are not met.
- Primary irritant effect:
- Skin corrosion/irritation: Based on available data, the classification criteria are not met.
- Serious eye damage/irritation: Based on available data, the classification criteria are not met.
- Respiratory or skin sensitisation: Based on available data, the classification criteria are not met.
- CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)
- Germ cell mutagenicity: Based on available data, the classification criteria are not met.
- Carcinogenicity: Based on available data, the classification criteria are not met.
- Reproductive toxicity: Based on available data, the classification criteria are not met.
- STOT-single exposure: Based on available data, the classification criteria are not met.
- STOT-repeated exposure: Based on available data, the classification criteria are not met.
- Aspiration hazard: Based on available data, the classification criteria are not met.

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:
  Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Safety data sheet
according to 1907/2006/EC, Article 31

Trade name: GlykoPrep Digestion (RX) Cartridges

(Contd. of page 4)

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.

14 Transport information

This Safety Data Sheet is written based on the encapsulated substance or mixture in this article. Since the hazardous ingredient is encapsulated, the risk of exposure by inhalation, ingestion, skin contact and eyes contact is minimum.

· **UN-Number**
  · ADR, ADN, IMDG, IATA not regulated

· **UN proper shipping name**
  · ADR, ADN, IMDG, IATA not regulated

· **Transport hazard class(es)**
  · ADR, ADN, IMDG, IATA not regulated

· **Packing group**
  · ADR, 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**
  · Directive 2012/18/EU
  · Named dangerous substances - ANNEX I Substance is not 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.
1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
  - **Trade name:** Blocking Reagent; Blocking Reagent, 24-ct
  - **Article number:** WS0255, WS0255-24, WS0255-GP

- **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 Manufacturing GmbH & Co. KG
    Hewlett-Packard-Str. 8
    76337 Waldbronn
    Germany
  - **Email:** pdl-msds_author@agilent.com
  - **Phone number:** 0800 603 1000
  - **Emergency telephone number:** CHEMTREC®: +(44)-870-8200418

2 Hazards identification

- **Classification of the substance or mixture**
  - **Classification according to Regulation (EC) No 1272/2008**
    The product is not classified, according to the CLP regulation.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
  - Not applicable.

- **Information concerning particular hazards for human and environment:**
  - The product does not have to be labelled due to the calculation procedure of the “General Classification guideline for preparations of the EU” in the latest valid version.

- **Classification system:**
  - The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

- **Label elements**
  - **Labelling according to EU guidelines:**
    Observe the general safety regulations when handling chemicals.
    The product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous Materials (German GefStoffV).

- **Other hazards**

- **Results of PBT and vPvB assessment**
  - **PBT:** Not applicable.
  - **vPvB:** Not applicable.

3 Composition/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.
Trade name: Blocking Reagent; Blocking Reagent, 24-ct

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 Firefighting 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.
· 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.
· Specific end use(s) No further relevant information available.

(Contd. on page 3)
8 Exposure controls/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:
    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: Light yellow
    - Odour: Characteristic
    - Odour threshold: Not determined.
  - pH-value: Not determined.
- Change in condition
  - Melting point/freezing point: Undetermined.
  - Initial boiling point and boiling range: Undetermined.
- 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: Not determined.
- Density: Not determined.
- Relative density: Not determined.
Trade name: Blocking Reagent; Blocking Reagent, 24-ct

- Vapour density: Not determined.
- Evaporation rate: Not determined.

- Solubility in / Miscibility with water: Fully miscible.
- Partition coefficient: n-octanol/water: Not determined.

- Viscosity:
  - Dynamic: Not determined.
  - Kinematic: Not determined.

- Solvent content:
  - Water: 99.0%

- 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: Based on available data, the classification criteria are not met.
- Primary irritant effect:
- Skin corrosion/irritation: Based on available data, the classification criteria are not met.
- Serious eye damage/irritation: Based on available data, the classification criteria are not met.
- Respiratory or skin sensitisation: Based on available data, the classification criteria are not met.
- CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction):
- Germ cell mutagenicity: Based on available data, the classification criteria are not met.
- Carcinogenicity: Based on available data, the classification criteria are not met.
- Reproductive toxicity: Based on available data, the classification criteria are not met.
- STOT-single exposure: Based on available data, the classification criteria are not met.
- STOT-repeated exposure: Based on available data, the classification criteria are not met.
- Aspiration hazard: Based on available data, the classification criteria are not met.

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.
Safety data sheet
according to 1907/2006/EC, Article 31

Trade name: Blocking Reagent; Blocking Reagent, 24-ct

- 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 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
  - ADR, ADN, IMDG, IATA not regulated
- UN proper shipping name
  - ADR, ADN, IMDG, IATA not regulated
- Transport hazard class(es)
  - ADR, ADN, IMDG, IATA not regulated
- Packing group
  - ADR, 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
  - 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.
1 Identification of the substance/mixture and of the company/undertaking

· Product identifier
  This product is considered an article. This Safety Data Sheet is written based on the encapsulated substance or mixture in this article.

· Trade name: GlykoPrep Cleanup (CU) Cartridges
· Article number: WS0263

· 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 Manufacturing GmbH & Co. KG
    Hewlett-Packard-Str. 8
    76337 Waldbronn
    Germany
  · Email: pdl-msds_author@agilent.com
  · Phone number: 0800 603 1000
  · Emergency telephone number: CHEMTREC®: +(44)-870-8200418

2 Hazards identification

· Classification of the substance or mixture
  · Classification according to Regulation (EC) No 1272/2008
    The substance is not classified, according to the CLP regulation.

  · Classification according to Directive 67/548/EEC or Directive 1999/45/EC: Not applicable.
  · Information concerning particular hazards for human and environment: Not applicable.

· Additional information:
  This article, when used under reasonable conditions and in accordance with the directions for use, should not present a health hazard. The substance or mixture is encapsulated in the article. Only if released due to use or processing of the article in a manner not in accordance with the product’s directions for use it may present potential health and safety hazards.

· Label elements
  · Labelling according to EU guidelines:
    Observe the general safety regulations when handling chemicals.
    The substance is not subject to classification according to EU lists and other sources of literature known to us.

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

3 Composition/information on ingredients

· Chemical characterisation: Substances
· CAS No. Description
  Modified Silica

· Additional information:
  This article, when used under reasonable conditions and in accordance with the directions for use, should not present a health hazard. The substance or mixture is encapsulated in the article. Only if released due to use or processing of the article in a manner not in accordance with the product’s directions for use it may present potential health and safety hazards.
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 Firefighting 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:** Do not allow to enter sewers / surface or ground water.
  - **Methods and material for containment and cleaning up:** Pick up mechanically.

- **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.
  - **Specific end use(s)**: No further relevant information available.

8 Exposure controls/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: Not required.
· 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:
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
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.
· 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: Solid
  · Colour: According to product specification
· Odour:
  · Odour: Characteristic
  · Odour threshold: Not determined.
· pH-value:
  · Not applicable.
· Change in condition
  · Melting point/freezing point: Undetermined.
  · Initial boiling point and boiling range: Undetermined.
· Flash point:
  · Not applicable.
· Flammability (solid, gas):
  · Product is not flammable.
· Decomposition temperature:
  · Not determined.
· Auto-ignition temperature:
  · Not determined.
· Explosive properties:
  · Product does not present an explosion hazard.
· Explosion limits:
  · Lower: Not determined.
  · Upper: Not determined.
· Vapour pressure:
  · Not applicable.
· Density:
  · Not determined.
· Relative density
  · Not determined.
· Vapour density
  · Not applicable.
· Evaporation rate
  · Not applicable.
Trade name: GlykoPrep Cleanup (CU) Cartridges

48.1.25

- Solubility in / Miscibility with water: Insoluble.
- Partition coefficient: n-octanol/water: Not determined.
- Viscosity:
  - Dynamic: Not applicable.
  - Kinematic: Not applicable.
- Solids content: 100.0 %
- 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: Based on available data, the classification criteria are not met.
- Primary irritant effect:
- Skin corrosion/irritation: Based on available data, the classification criteria are not met.
- Serious eye damage/irritation: Based on available data, the classification criteria are not met.
- Respiratory or skin sensitisation: Based on available data, the classification criteria are not met.
- CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)
  - Germ cell mutagenicity: Based on available data, the classification criteria are not met.
  - Carcinogenicity: Based on available data, the classification criteria are not met.
  - Reproductive toxicity: Based on available data, the classification criteria are not met.
  - STOT-single exposure: Based on available data, the classification criteria are not met.
  - STOT-repeated exposure: Based on available data, the classification criteria are not met.
  - Aspiration hazard: Based on available data, the classification criteria are not met.

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:
  - Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
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.

14 Transport information

This Safety Data Sheet is written based on the encapsulated substance or mixture in this article. Since the hazardous ingredient is encapsulated, the risk of exposure by inhalation, ingestion, skin contact and eyes contact is minimum.

- UN-Number
  - ADR, ADN, IMDG, IATA: not regulated

- UN proper shipping name
  - ADR, ADN, IMDG, IATA: not regulated

- Transport hazard class(es)
  - ADR, ADN, IMDG, IATA
    - Class: not regulated

- Packing group
  - ADR, 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
- Directive 2012/18/EU
- Named dangerous substances - ANNEX I Substance is not 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.
1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
  - **Trade name:** 25X Digestion Buffer
  - **Article number:** WS0276, WS0276-GP

- **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 Manufacturing GmbH & Co. KG
    Hewlett-Packard-Str. 8
    76337 Waldbronn
    Germany
  - **Email:** pdl-msds_author@agilent.com
  - **Phone number:** 0800 603 1000
  - **Emergency telephone number:** CHEMTREC®: +(44)-870-8200418

2 Hazards identification

- **Classification of the substance or mixture**
  - **Classification according to Regulation (EC) No 1272/2008**
    The product is not classified, according to the CLP regulation.
  - **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
    Not applicable.

- **Information concerning particular hazards for human and environment:**
  - The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

- **Classification system:**
  - The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

- **Label elements**
  - **Labelling according to EU guidelines:**
    Observe the general safety regulations when handling chemicals.
    The product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous Materials (German GefStoffV).
  - **Other hazards**
  - **Results of PBT and vPvB assessment**
    - **PBT:** Not applicable.
    - **vPvB:** Not applicable.

3 Composition/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
  - 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 Firefighting 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: 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.
  - Specific end use(s): No further relevant information available.
8 Exposure controls/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:
    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: Colourless
    - Odour: Odourless
    - Odour threshold: Not determined.
  - pH-value at 20 °C: 9.273
  - 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 at 20 °C: 0.98878 g/cm³
  - Relative density: Not determined.
  - Vapour density: Not determined.
Trade name: 25X Digestion Buffer

Evaporation rate: Not determined.

Solubility in 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 96.7%
Solids content: 0.0%

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: Based on available data, the classification criteria are not met.
- Primary irritant effect:
- Skin corrosion/irritation: Based on available data, the classification criteria are not met.
- Serious eye damage/irritation: Based on available data, the classification criteria are not met.
- Respiratory or skin sensitisation: Based on available data, the classification criteria are not met.
- CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction):
- Germ cell mutagenicity: Based on available data, the classification criteria are not met.
- Carcinogenicity: Based on available data, the classification criteria are not met.
- Reproductive toxicity: Based on available data, the classification criteria are not met.
- STOT-single exposure: Based on available data, the classification criteria are not met.
- STOT-repeated exposure: Based on available data, the classification criteria are not met.
- Aspiration hazard: Based on available data, the classification criteria are not met.

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:
    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.

### 14 Transport information

· UN-Number
  · ADR, ADN, IMDG, IATA not regulated

· UN proper shipping name
  · ADR, ADN, IMDG, IATA not regulated

· Transport hazard class(es)
  · ADR, ADN, IMDG, IATA not regulated

· Class not regulated

· Packing group
  · ADR, 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
    · 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.
1 Identification of the substance/mixture and of the company/undertaking

· Product identifier
  · Trade name: AdvanceBio N-Glycanase; 4x AdvancedBio N-Glycanase (24-ct); Advance Bio N-Glycanase for GlykoPrepPlus
  · Article number: WS0278, WS0278-GP, WS0278-24

· 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 Manufacturing GmbH & Co. KG
    Hewlett-Packard-Str. 8
    76337 Waldbronn
    Germany
  · Email: pdl-msds_author@agilent.com
  · Phone number: 0800 603 1000
  · Emergency telephone number: CHEMTREC®: +(44)-870-8200418

2 Hazards identification

· Classification of the substance or mixture
  · Classification according to Regulation (EC) No 1272/2008

  GHS08 health hazard
  Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

  GHS07
  Skin Sens. 1 H317 May cause an allergic skin reaction.

· Label elements
  · Labelling according to Regulation (EC) No 1272/2008
    The product is classified and labelled according to the CLP regulation.
  · Hazard pictograms

  GHS08

· Signal word Danger

· Hazard statements
  H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
  H317 May cause an allergic skin reaction.

· Precautionary statements
  P101 If medical advice is needed, have product container or label at hand.
  P102 Keep out of reach of children.

(Contd. on page 2)
Trade name: AdvanceBio N-Glycanase; 4x AdvancedBio N-Glycanase (24-ct); Advance Bio N-Glycanase for GlykoPrepPlus

P103 Read label before use.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P285 In case of inadequate ventilation wear respiratory protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P401 Store in accordance with local/regional/national/international regulations.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- Labelling of packages where the contents do not exceed 125 ml
- Hazard pictograms

GHS08

- Signal word Danger
- Hazard statements
  H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
  H317 May cause an allergic skin reaction.
- Precautionary statements
  P101 If medical advice is needed, have product container or label at hand.
  P102 Keep out of reach of children.
  P103 Read label before use.
  P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
  P280 Wear protective gloves/protective clothing/eye protection/face protection.
  P285 In case of inadequate ventilation wear respiratory protection.
  P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  P401 Store in accordance with local/regional/national/international regulations.
  P501 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/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 and to be sure call for a doctor.
    In case of unconsciousness place patient stably in side position for transportation.
  - After skin contact: Immediately wash with water and soap and rinse thoroughly.
Trade name: AdvanceBio N-Glycanase; 4x AdvancedBio N-Glycanase (24-ct); Advance Bio N-Glycanase for GlykoPrepPlus

- After eye contact: Rinse opened eye for several minutes under running water.
- After swallowing: If symptoms persist consult 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 Firefighting 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.
- Methods and material for containment and cleaning up:
  - Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  - Dispose contaminated material as waste according to item 13.
  - Ensure adequate ventilation.
- 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
    - Ensure good ventilation/exhaustion at the workplace.
    - Prevent formation of aerosols.
  - 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/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:
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.

Respiratory protection:
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Protection of hands:

Protective gloves

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 breakthrough 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: Undetermined.
Initial boiling point and boiling range: Undetermined.

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.
Trade name: AdvanceBio N-Glycanase; 4x AdvancedBio N-Glycanase (24-ct); Advance Bio N-Glycanase for GlykoPrepPlus

<table>
<thead>
<tr>
<th>· Explosion limits:</th>
<th></th>
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<tbody>
<tr>
<td>Lower: Not determined.</td>
<td></td>
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<tr>
<td>Upper: Not determined.</td>
<td></td>
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<tr>
<td>· Vapour pressure at 20 °C:</td>
<td>23 hPa</td>
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<tr>
<td>· Density: Not determined.</td>
<td></td>
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<tr>
<td>· Relative density: Not determined.</td>
<td></td>
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<tr>
<td>· Vapour density: Not determined.</td>
<td></td>
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<tr>
<td>· Evaporation rate: Not determined.</td>
<td></td>
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<tr>
<td>· Solubility in / Miscibility with water: Fully miscible.</td>
<td></td>
</tr>
<tr>
<td>· Partition coefficient: n-octanol/water: Not determined.</td>
<td></td>
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<tr>
<td>· Viscosity: Not determined.</td>
<td></td>
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<tr>
<td>· Dynamic: Not determined.</td>
<td></td>
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<tr>
<td>· Kinematic: Not determined.</td>
<td></td>
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<tr>
<td>· Solvent content: Water: 99.3 %</td>
<td></td>
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<tr>
<td>· Solids content: 0.7 %</td>
<td></td>
</tr>
<tr>
<td>· Other information: No further relevant information available.</td>
<td></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: Based on available data, the classification criteria are not met.
- Primary irritant effect:
- Skin corrosion/irritation: Based on available data, the classification criteria are not met.
- Serious eye damage/irritation: Based on available data, the classification criteria are not met.
- Respiratory or skin sensitisation:
  - May cause allergy or asthma symptoms or breathing difficulties if inhaled.
  - May cause an allergic skin reaction.
- CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)
- Germ cell mutagenicity: Based on available data, the classification criteria are not met.
- Carcinogenicity: Based on available data, the classification criteria are not met.
- Reproductive toxicity: Based on available data, the classification criteria are not met.
- STOT—single exposure: Based on available data, the classification criteria are not met.

(Contd. on page 6)
**Safety data sheet**  
**according to 1907/2006/EC, Article 31**

**Trade name:** AdvanceBio N-Glycanase; 4x AdvancedBio N-Glycanase (24-ct); Advance Bio N-Glycanase for GlykoPrepPlus

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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.
  - **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

14 **Transport information**

- **UN-Number**
  - ADR, ADN, IMDG, IATA not regulated
- **UN proper shipping name**
  - ADR, ADN, IMDG, IATA not regulated
- **Transport hazard class(es)**
  - ADR, ADN, IMDG, IATA not regulated
- **Packing group**
  - ADR, 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.
Trade name: AdvanceBio N-Glycanase; 4x AdvancedBio N-Glycanase (24-ct); Advance Bio N-Glycanase for GlykoPrepPlus

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
  - Directive 2012/18/EU
  - Named dangerous substances - ANNEX I None of the ingredients is listed.
  - REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
  - 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:
  Resp. Sens. 1: Respiratory sensitisation – Category 1
  Skin Sens. 1: Skin sensitisation – Category 1
## 1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
  - **Trade name:** APTS Catalyst; APTS Catalyst, 24-ct
  - **Article number:** WS0295, WS0295-24

- **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 Manufacturing GmbH & Co. KG
    Hewlett-Packard-Str. 8
    76337 Waldbronn
    Germany
  - **Email:** pdl-msds_author@agilent.com
  - **Phone number:** 0800 603 1000
  - **Emergency telephone number:** CHEMTREC®: +44-(44)-870-8200418

## 2 Hazards identification

- **Classification of the substance or mixture**
  - **Classification according to Regulation (EC) No 1272/2008**

  | GHS01 exploding bomb          |

  | GHS08 health hazard |
  | Resp. Sens. 1B | H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |

  | GHS05 corrosion |
  | Skin Corr. 1B | H314 | Causes severe skin burns and eye damage. |

  | GHS07 |
  | Acute Tox. 4 | H302 | Harmful if swallowed. |
  | Acute Tox. 4 | H312 | Harmful in contact with skin. |
  | STOT SE 3 | H335 | May cause respiratory irritation. |
  | Flam. Liqu. 3 | H226 | Flammable liquid and vapour. |

- **Label elements**
  - **Labelling according to Regulation (EC) No 1272/2008**
  The product is classified and labelled according to the CLP regulation.

(Contd. on page 2)
Trade name: APTS Catalyst; APTS Catalyst, 24-ct

Hazard pictograms

GHS01 GHS05 GHS07 GHS08

Signal word Danger

Hazard-determining components of labelling:
difluoroacetic acid

Hazard statements
H200 Unstable explosives.
H226 Flammable liquid and vapour.
H302+H312 Harmful if swallowed or in contact with skin.
H314 Causes severe skin burns and eye damage.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335 May cause respiratory irritation.

Precautionary statements
P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P103 Read label before use.
P270 Do not eat, drink or smoke when using this product.
P305+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER/doctor.
P321 Specific treatment (see on this label).
P362+P364 Take off contaminated clothing and wash it before reuse.
P373 DO NOT fight fire when fire reaches explosives.
P380 Evacuate area.
P401 Store in accordance with local/regional/national/international regulations.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Labelling of packages where the contents do not exceed 125 ml

Hazard pictograms

GHS01 GHS05 GHS07 GHS08

Signal word Danger

Hazard-determining components of labelling:
difluoroacetic acid

Hazard statements
H200 Unstable explosives.
H302+H312 Harmful if swallowed or in contact with skin.
H314 Causes severe skin burns and eye damage.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335 May cause respiratory irritation.

Precautionary statements
P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P103 Read label before use.
Trade name: APTS Catalyst; APTS Catalyst, 24-ct

P270 Do not eat, drink or smoke when using this product.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER/doctor.
P321 Specific treatment (see on this label).
P362+P364 Take off contaminated clothing and wash it before reuse.
P373 DO NOT fight fire when fire reaches explosives.
P380 Evacuate area.
P401 Store in accordance with local/regional/national/international regulations.
P405 Store locked up.
P501 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/information on ingredients

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

· Dangerous components:

| CAS: 67-68-5 | dimethyl sulfoxide | Skin Irrit. 2, H315; Eye Irrit. 2, H319 |
| EINECS: 200-664-3 | 75.0% |

| CAS: 381-73-7 | difluoroacetic acid | Skin Corr. 1B, H314; Eye Irrit. 2, H319; STOT SE 3, H335 |
| EINECS: 206-839-0 | 25.0% |

· Additional information: For the wording of the listed hazard phrases refer to section 16.

4 First aid measures

· Description of first aid measures
· General information: Immediately remove any clothing soiled by the product.
· After inhalation: In case of unconsciousness place patient stably in side position for transportation.
· After skin contact: Immediately wash with water and soap and rinse thoroughly.
· After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
· After swallowing: Drink plenty of water and provide fresh air. Call for a doctor immediately.
· 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 Firefighting measures

· Extinguishing media
· Suitable extinguishing agents: CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
· Special hazards arising from the substance or mixture No further relevant information available.
Safety data sheet
according to 1907/2006/EC, Article 31

Revision Date: 28.05.2019
Issue Date: 01.05.2019

Trade name: APTS Catalyst; APTS Catalyst, 24-ct

(Contd. of page 3)

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures
  Remove persons from danger area.
  Wear protective equipment. Keep unprotected persons away.
  Environmental precautions: 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).
  Use neutralising agent.
  Dispose contaminated material as waste according to item 13.
  Ensure adequate ventilation.
· 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 5)

7 Handling and storage

· Handling:
  · Precautions for safe handling
    Ensure good ventilation/exhaustion at the workplace.
    Open and handle receptacle with care.
    Prevent formation of aerosols.
  · Information about fire - and explosion protection:
    Keep ignition sources away - Do not smoke.
    Prevent impact and friction.
· 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:
      Keep container tightly sealed.
      Protect from heat and direct sunlight.
  · Specific end use(s) No further relevant information available.

8 Exposure controls/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:
      Keep away from foodstuffs, beverages and feed.
Trade name: APTS Catalyst; APTS Catalyst, 24-ct

Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.

- Respiratory protection:
  In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

- Protection of hands:
  Protective gloves
  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:
  Tightly sealed goggles

9 Physical and chemical properties

- Information on basic physical and chemical properties
  - General Information
    - Appearance:
      - Form: Liquid
      - Colour: Clear
      - Odour: Acrid
      - Odour threshold: Not determined.
    - pH-value: Not determined.
    - Change in condition
      - Melting point/freezing point: Undetermined.
      - Initial boiling point and boiling range: Undetermined.
    - Flash point: 78 °C
    - Flammability (solid, gas): Not applicable.
    - Decomposition temperature: Not determined.
    - Auto-ignition temperature: Product is not selfigniting.
    - Explosive properties: Risk of explosion by shock, friction, fire or other sources of ignition.
    - Explosion limits:
      - Lower: Not determined.
      - Upper: Not determined.
    - Vapour pressure: Not determined.
    - Density: Not determined.
### 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**
  - Harmful if swallowed or in contact with skin.

<table>
<thead>
<tr>
<th>LD/LC50 values relevant for classification:</th>
</tr>
</thead>
<tbody>
<tr>
<td>67-68-5 dimethyl sulfoxide</td>
</tr>
<tr>
<td>Oral LD50</td>
</tr>
<tr>
<td>Dermal LD50</td>
</tr>
<tr>
<td>Inhalative LC50/4 h</td>
</tr>
<tr>
<td>14,500 mg/kg (rat)</td>
</tr>
<tr>
<td>&gt;5,000 mg/kg (rabbit)</td>
</tr>
<tr>
<td>40,250 mg/l (rat)</td>
</tr>
</tbody>
</table>

- **Primary irritant effect:**
  - **Skin corrosion/irritation**: Causes severe skin burns and eye damage.
  - **Serious eye damage/irritation**: Causes severe skin burns and eye damage.
  - **Respiratory or skin sensitisation**: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

- **CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)**
  - **Germ cell mutagenicity**: Based on available data, the classification criteria are not met.
  - **Carcinogenicity**: Based on available data, the classification criteria are not met.
  - **Reproductive toxicity**: Based on available data, the classification criteria are not met.

- **STOT-single exposure**
  - May cause respiratory irritation.

- **STOT-repeated exposure**
  - Based on available data, the classification criteria are not met.
## 12 Ecological information

### Toxicity

#### Aquatic toxicity:
- **67-68-5 dimethyl sulfoxide**
  - EC50 [mg/kg (daphnia)]

#### 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:
- 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.
- Must not reach sewage water or drainage ditch undiluted or unneutralised.

#### 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

**Not Regulated, De minimis Quantities**

<table>
<thead>
<tr>
<th><strong>UN-Number</strong></th>
<th>ADR, ADN, IMDG, IATA</th>
<th>not regulated</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>UN proper shipping name</strong></td>
<td>ADR, ADN, IMDG, IATA</td>
<td>not regulated</td>
</tr>
<tr>
<td><strong>Transport hazard class(es)</strong></td>
<td>ADR, ADN, IMDG, IATA</td>
<td>not regulated</td>
</tr>
<tr>
<td><strong>Packing group</strong></td>
<td>ADR, IMDG, IATA</td>
<td>not regulated</td>
</tr>
<tr>
<td><strong>Environmental hazards:</strong></td>
<td>Not applicable.</td>
<td></td>
</tr>
</tbody>
</table>
**Trade name:** APTS Catalyst; APTS Catalyst, 24-ct

(Contd. of page 7)

<table>
<thead>
<tr>
<th>Special precautions for user</th>
<th>Not applicable.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport in bulk according to Annex II of Marpol and the IBC Code</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>UN &quot;Model Regulation&quot;:</td>
<td>not regulated</td>
</tr>
</tbody>
</table>

**15 Regulatory information**

- Safety, health and environmental regulations/legislation specific for the substance or mixture
  - Directive 2012/18/EU
  - Named dangerous substances - ANNEX I None of the ingredients is listed.
  - Seveso category P1a EXPLOSIVES
  - Qualifying quantity (tonnes) for the application of lower-tier requirements 10 t
  - Qualifying quantity (tonnes) for the application of upper-tier requirements 50 t
  - REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
  - 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.

- Relevant phrases
  H314 Causes severe skin burns and eye damage.
  H315 Causes skin irritation.
  H319 Causes serious eye irritation.
  H335 May cause respiratory irritation.

- Abbreviations and acronyms:
  Unst. Expl.: Explosives – Unstable explosive
  Flam. Liq. 3: Flammable liquids – Category 3
  Acute Tox. 4: Acute toxicity – Category 4
  Skin Corr. 1B: Skin corrosion/irritation – Category 1B
  Skin Irrit. 2: Skin corrosion/irritation – Category 2
  Resp. Sens. 1B: Respiratory sensitisation – Category 1B
  STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
- **Trade name:** APTS Solution; APTS Solution, 24-ct
- **Article number:** WS0299, WS0299-24

- **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 Manufacturing GmbH & Co. KG
  Hewlett-Packard-Str. 8
  76337 Waldbronn
  Germany
- **Email:** pdl-msds_author@agilent.com
- **Phone number:** 0800 603 1000
- **Emergency telephone number:** CHEMTREC®: +(44)-870-8200418

2 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**

  ![GHS07](image)

  Skin Irrit. 2  H315  Causes skin irritation.
  Eye Irrit. 2  H319  Causes serious eye irritation.
  STOT SE 3  H335  May cause respiratory irritation.

- **Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
  The product is classified and labelled according to the CLP regulation.

- **Hazard pictograms**

  ![GHS07](image)

- **Signal word** Warning

- **Hazard-determining components of labelling:**
  8-aminopyrene-1,3,6-trisulfonic acidtrisodium salt

- **Hazard statements**
  H315 Causes skin irritation.
  H319 Causes serious eye irritation.
  H335 May cause respiratory irritation.

- **Precautionary statements**
  P101  If medical advice is needed, have product container or label at hand.
  P102  Keep out of reach of children.
  P103  Read label before use.

(Contd. on page 2)
Trade name: APTS Solution; APTS Solution, 24-ct

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves / eye protection / face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P401 Store in accordance with local/regional/national/international regulations.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Labelling of packages where the contents do not exceed 125 ml

Hazard pictograms

GHS07

Signal word Warning

Hazard-determining components of labelling:
8-aminopyrene-1,3,6-trisulfonic acidtrisodium salt

Hazard statements
H335 May cause respiratory irritation.

Precautionary statements
P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P103 Read label before use.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves / eye protection / face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P401 Store in accordance with local/regional/national/international regulations.
P405 Store locked up.
P501 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/information on ingredients

Chemical characterisation: Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

| Chemical characterisation: 8-aminopyrene-1,3,6-trisulfonic acidtrisodium salt | 22.2% |
| T96504-57-1 | Skin Irrit. 2; Eye Irrit. 2; H315; H319; STOT SE 3, H335 |

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: In case of unconsciousness place patient stably in side position for transportation.
After skin contact: Immediately wash with water and soap and rinse thoroughly.
Trade name: APTS Solution; APTS Solution, 24-ct

After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

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 Firefighting 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).

Ensure adequate ventilation.

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:

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

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: Keep container tightly sealed.

Specific end use(s): No further relevant information available.

8 Exposure controls/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:
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.

Respiratory protection:
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Protection of hands:

Protective gloves

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:

Tightly sealed goggles

9 Physical and chemical properties

Information on basic physical and chemical properties
General Information
Appearance:
Form: Liquid
Colour: Orange
Odour: Characteristic
Odour threshold: Not determined.

pH-value: Not determined.

Change in condition
Melting point/freezing point: Undetermined.
Initial boiling point and boiling range: 100 °C

Flash point: Not applicable.

Flammability (solid, gas): Not applicable.

Decomposition temperature: Not determined.
### Safety data sheet

**according to 1907/2006/EC, Article 31**

**Trade name:** APTS Solution; APTS Solution, 24-ct

- **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:** Fully miscible.
- **Partition coefficient: n-octanol/water:** Not determined.
- **Viscosity:**
  - Dynamic: Not determined.
  - Kinematic: Not determined.
- **Solvent content:**
  - Water: 77.8 %
  - Solids content: 23.0 %
- **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: Based on available data, the classification criteria are not met.
  - Primary irritant effect:
    - Skin corrosion/irritation: Causes skin irritation.
    - Serious eye damage/irritation: Causes serious eye irritation.
  - Respiratory or skin sensitisation: Based on available data, the classification criteria are not met.
  - CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction): Based on available data, the classification criteria are not met.
  - Germ cell mutagenicity: Based on available data, the classification criteria are not met.
  - Carcinogenicity: Based on available data, the classification criteria are not met.
Trade name: APTS Solution; APTS Solution, 24-ct

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:
      - 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: 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

- Not Regulated, De minimis Quantities.

  - UN-Number
    - ADR, ADN, IMDG, IATA: not regulated

  - UN proper shipping name
    - ADR, ADN, IMDG, IATA: not regulated

  - Transport hazard class(es)
    - ADR, ADN, IMDG, IATA: not regulated
    - Class: not regulated

  - Packing group
    - ADR, IMDG, IATA: not regulated
Safety data sheet
according to 1907/2006/EC, Article 31

Trade name: APTS Solution; APTS Solution, 24-ct

<table>
<thead>
<tr>
<th>Environmental hazards:</th>
<th>Not applicable.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special precautions for user</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Transport in bulk according to Annex II of Marpol and the IBC Code</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>UN &quot;Model Regulation&quot;:</td>
<td>not regulated</td>
</tr>
</tbody>
</table>

15 Regulatory information

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

- Directive 2012/18/EU
- Named dangerous substances - ANNEX I None of the ingredients is listed.
- REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
- 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.

- Relevant phrases
  H315 Causes skin irritation.
  H319 Causes serious eye irritation.
  H335 May cause respiratory irritation.

- Abbreviations and acronyms:
  Skin Irrit. 2: Skin corrosion/irritation – Category 2
  Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
  STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
1 Identification of the substance/mixture and of the company/undertaking

- Product identifier
- Trade name: Reductant Solution
- Article number: WS0300, WS0300-24

- 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 Manufacturing GmbH & Co. KG
    Hewlett-Packard-Str. 8
    76337 Waldbronn
    Germany
  - Email: pdl-msds_author@agilent.com
  - Phone number: 0800 603 1000
  - Emergency telephone number: CHEMTREC®: +(44)-870-8200418

2 Hazards identification

- Classification of the substance or mixture
- Classification according to Regulation (EC) No 1272/2008

  ![GHS06 skull and crossbones]
  Acute Tox. 2 H300 Fatal if swallowed.
  Acute Tox. 2 H310 Fatal in contact with skin.

  ![GHS05 corrosion]
  Skin Corr. 1B H314 Causes severe skin burns and eye damage.

  ![GHS09 environment]
  Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

  ![GHS07]
  STOT SE 3 H335 May cause respiratory irritation.

- Label elements
- Labelling according to Regulation (EC) No 1272/2008
  The product is classified and labelled according to the CLP regulation.

(Contd. on page 2)
Trade name: Reductant Solution

· Hazard pictograms

GHS05  GHS06  GHS09

· Signal word Danger

· Hazard-determining components of labelling:
sodium cyanborohydride

· Hazard statements
H300+H310 Fatal if swallowed or in contact with skin.
H314 Causes severe skin burns and eye damage.
H335 May cause respiratory irritation.
H411 Toxic to aquatic life with long lasting effects.

· Precautionary statements
P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P103 Read label before use.
P222 Do not allow contact with air.
P270 Do not eat, drink or smoke when using this product.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· Additional information:
E.UH032 Contact with acids liberates very toxic gas.

· Labelling of packages where the contents do not exceed 125 ml

· Hazard pictograms

GHS05  GHS06  GHS09

· Signal word Danger

· Hazard-determining components of labelling:
sodium cyanborohydride

· Hazard statements
H300+H310 Fatal if swallowed or in contact with skin.
H314 Causes severe skin burns and eye damage.
H335 May cause respiratory irritation.

· Precautionary statements
P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P103 Read label before use.
P222 Do not allow contact with air.
P270 Do not eat, drink or smoke when using this product.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
Safety data sheet
according to 1907/2006/EC, Article 31

Revision Date: 28.05.2019
Issue Date: 24.04.2019

Trade name: Reductant Solution

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

3 Composition/information on ingredients

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

· Dangerous components:
  · CAS: 67-68-5
dimethyl sulfoxide
  · EINECS: 200-664-3
  · Skin Irrit. 2, H315; Eye Irrit. 2, H319
  · 86.0%
  · CAS: 25895-60-7
sodium cyanborohydride
  · EINECS: 247-317-2
  · Flam. Sol. 1, H228; Water-react. 2, H261; Skin Corr. 1B, H314
  · 14.0%

· Additional information: For the wording of the listed hazard phrases refer to section 16.

4 First aid measures

· Description of first aid measures
· General information: Immediately remove any clothing soiled by the product.
· After inhalation: In case of unconsciousness place patient stably in side position for transportation.
· After skin contact: Immediately wash with water and soap and rinse thoroughly.
· After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
· After swallowing: Drink plenty of water and provide fresh air. Call for a doctor immediately.
· 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 Firefighting measures

· Extinguishing media
· Suitable extinguishing agents:
  · Sand. Do not use water.
  · Use fire extinguishing methods suitable to surrounding conditions.
· For safety reasons unsuitable extinguishing agents: Water
· Special hazards arising from the substance or mixture: No further relevant information available.
· Advice for firefighters
· Protective equipment: Mouth respiratory protective device.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures
  · Mount respiratory protective device.
  · Wear protective equipment. Keep unprotected persons away.
· Environmental precautions: 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).
Trade name: Reductant Solution

Use neutralising agent.
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
Do not flush with water or aqueous cleansing agents

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
    Ensure good ventilation/exhaustion at the workplace.
    Prevent formation of aerosols.
  · 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: Do not store together with acids.
  · Further information about storage conditions:
    Keep container tightly sealed.
    Store in cool, dry conditions in well sealed receptacles.

· Specific end use(s) No further relevant information available.

8 Exposure controls/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:
      Keep away from foodstuffs, beverages and feed.
      Immediately remove all soiled and contaminated clothing
      Wash hands before breaks and at the end of work.
      Avoid contact with the eyes and skin.
    · Respiratory protection:
      In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
  · Protection of hands:

Protective gloves

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
9 Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information on basic physical and chemical properties</td>
<td></td>
</tr>
<tr>
<td>General Information</td>
<td></td>
</tr>
<tr>
<td><strong>Appearance:</strong></td>
<td></td>
</tr>
<tr>
<td>Form:</td>
<td>Liquid</td>
</tr>
<tr>
<td>Colour:</td>
<td>Colourless</td>
</tr>
<tr>
<td>Odour:</td>
<td>Characteristic</td>
</tr>
<tr>
<td>Odour threshold:</td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>pH-value:</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Change in condition</strong></td>
<td></td>
</tr>
<tr>
<td>Melting point/freezing point:</td>
<td>Undetermined</td>
</tr>
<tr>
<td>Initial boiling point and boiling range:</td>
<td>Undetermined</td>
</tr>
<tr>
<td><strong>Flash point:</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Flammability (solid, gas):</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Decomposition temperature:</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Auto-ignition temperature:</strong></td>
<td>Product is not selfigniting.</td>
</tr>
<tr>
<td><strong>Explosive properties:</strong></td>
<td>Product does not present an explosion hazard.</td>
</tr>
<tr>
<td><strong>Explosion limits:</strong></td>
<td></td>
</tr>
<tr>
<td>Lower:</td>
<td>Not determined</td>
</tr>
<tr>
<td>Upper:</td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Vapour pressure:</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Density:</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Relative density</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Vapour density</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Evaporation rate</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Solubility in / Miscibility with water:</strong></td>
<td>Not miscible or difficult to mix.</td>
</tr>
<tr>
<td><strong>Partition coefficient: n-octanol/water:</strong></td>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>Viscosity:</strong></td>
<td></td>
</tr>
<tr>
<td>Dynamic:</td>
<td>Not determined</td>
</tr>
<tr>
<td>Kinematic:</td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Solvent content:</strong></td>
<td></td>
</tr>
<tr>
<td>Organic solvents:</td>
<td>86.0 %</td>
</tr>
</tbody>
</table>
Trade name: Reductant Solution

Solids content: 14.0 %

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
  Fatal if swallowed or in contact with skin.

- LD/LC50 values relevant for classification:

<table>
<thead>
<tr>
<th></th>
<th>67-68-5 dimethyl sulfoxide</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>LD50 14,500 mg/kg (rat)</td>
</tr>
<tr>
<td>Dermal</td>
<td>LD50 &gt;5,000 mg/kg (rabbit)</td>
</tr>
<tr>
<td>Inhalative</td>
<td>LC50/4 h 40,250 mg/l (rat)</td>
</tr>
</tbody>
</table>

- Primary irritant effect:
  - Skin corrosion/irritation
    Causes severe skin burns and eye damage.
  - Serious eye damage/irritation
    Causes severe skin burns and eye damage.
- Respiratory or skin sensitisation
  Based on available data, the classification criteria are not met.
- CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)
- Germ cell mutagenicity
  Based on available data, the classification criteria are not met.
- Carcinogenicity
  Based on available data, the classification criteria are not met.
- Reproductive toxicity
  Based on available data, the classification criteria are not met.
- STOT-single exposure
  May cause respiratory irritation.
- STOT-repeated exposure
  Based on available data, the classification criteria are not met.
- Aspiration hazard
  Based on available data, the classification criteria are not met.

12 Ecological information

- Toxicity
  - Aquatic toxicity:
    - 67-68-5 dimethyl sulfoxide
      EC50 |mg/kg (daphnia) |
- Persistence and degradability
  No further relevant information available.
Trade name: Reductant Solution

- **Behaviour in environmental systems:**
  - **Bioaccumulative potential** No further relevant information available.
  - **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
  - **General notes:**
    Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
    Do not allow product to reach ground water, water course or sewage system.
    Must not reach sewage water or drainage ditch undiluted or unneutralised.
    Danger to drinking water if even small quantities leak into the ground.
- **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

Not Regulated, De minimis Quantities

- **UN-Number**
  - ADR: UN3082
  - IMDG, IATA: not regulated
- **UN proper shipping name**
  - ADR: 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
  - IMDG, IATA: not regulated
- **Transport hazard class(es)**
  - **ADR**
    - **Class** 9 Miscellaneous dangerous substances and articles.
    - **Label** 9
  - **IMDG, IATA**
    - **Class** not regulated
- **Packing group**
  - **ADR** III
  - **IMDG, IATA** not regulated
### Safety data sheet
according to 1907/2006/EC, Article 31

**Trade name:** Reductant Solution

<table>
<thead>
<tr>
<th>Environmental hazards:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special marking (ADR):</td>
</tr>
<tr>
<td>Symbol (fish and tree)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Special precautions for user</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warning: Miscellaneous dangerous substances and articles.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Danger code (Kemler):</th>
</tr>
</thead>
<tbody>
<tr>
<td>90</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Transport/Additional information:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADR</td>
</tr>
<tr>
<td>Limited quantities (LQ): 5L</td>
</tr>
<tr>
<td>Excepted quantities (EQ): Code: E1</td>
</tr>
<tr>
<td>Maximum net quantity per inner packaging: 30 ml</td>
</tr>
<tr>
<td>Maximum net quantity per outer packaging: 1000 ml</td>
</tr>
<tr>
<td>Transport category: 3</td>
</tr>
<tr>
<td>Tunnel restriction code: -</td>
</tr>
<tr>
<td>UN &quot;Model Regulation&quot;: UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III</td>
</tr>
</tbody>
</table>

### 15 Regulatory information

- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **Seveso category**
  - H2 ACUTE TOXIC
  - E2 Hazardous to the Aquatic Environment
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 50 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3
- **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.

- **Relevant phrases**
  - H228 Flammable solid.
  - H261 In contact with water releases flammable gases.
  - H314 Causes severe skin burns and eye damage.
  - H315 Causes skin irritation.
  - H319 Causes serious eye irritation.

- **Abbreviations and acronyms:**
  - Flam. Sol. 1: Flammable solids – Category 1
  - Water-react. 2: Substances and mixtures which in contact with water emit flammable gases – Category 2
  - Acute Tox. 2: Acute toxicity – Category 2
  - Skin Corr. 1B: Skin corrosion/irritation – Category 1B
  - Skin Irrit. 2: Skin corrosion/irritation – Category 2
  - Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
  - STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
  - Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2
1 Identification of the substance/mixture and of the company/undertaking

· **Product identifier**
  · **Trade name:** 5X APTS Sample Load Buffer
  · **Article number:** WS0301-24, WS0301-GP

· **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 Manufacturing GmbH & Co. KG
    Hewlett-Packard-Str. 8
    76337 Waldbronn
    Germany
  · **Email:** pdl-msds_author@agilent.com
  · **Phone number:** 0800 603 1000
  · **Emergency telephone number:** CHEMTREC®: +(44)-870-8200418

2 Hazards identification

· **Classification of the substance or mixture**
  · **Classification according to Regulation (EC) No 1272/2008**

![GHS07](image)

Acute Tox. 4  H302  Harmful if swallowed.
Skin Irrit. 2  H315  Causes skin irritation.
STOT SE 3  H335  May cause respiratory irritation.
Aquatic Chronic 4  H413  May cause long lasting harmful effects to aquatic life.

· **Label elements**
  · **Labelling according to Regulation (EC) No 1272/2008**
    The product is classified and labelled according to the CLP regulation.

· **Hazard pictograms**

![GHS07](image)

· **Signal word** Warning
  · **Hazard statements**
    H302  Harmful if swallowed.
    H315  Causes skin irritation.
    H335  May cause respiratory irritation.
    H413  May cause long lasting harmful effects to aquatic life.

· **Precautionary statements**
  · **P101** If medical advice is needed, have product container or label at hand.
  · **P102** Keep out of reach of children.
Trade name: 5X APTS Sample Load Buffer

P103 Read label before use.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312 IF SWALLOWED: Call a doctor if you feel unwell.
P304+P312 IF INHALED: Call a doctor if you feel unwell.
P401 Store in accordance with local/regional/national/international regulations.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard pictograms

GHS07

Signal word Warning
Hazard statements
H302 Harmful if swallowed.
H335 May cause respiratory irritation.
H413 May cause long lasting harmful effects to aquatic life.

Precautionary statements
P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
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P301+P312 IF SWALLOWED: Call a doctor if you feel unwell.
P304+P312 IF INHALED: Call a doctor if you feel unwell.
P401 Store in accordance with local/regional/national/international regulations.
P501 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/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.
5 Firefighting 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.

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/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.
Trade name: 5X APTS Sample Load Buffer

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**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General Information</strong></td>
<td></td>
</tr>
<tr>
<td>Appearance:</td>
<td></td>
</tr>
<tr>
<td>Form</td>
<td>Liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>Colourless</td>
</tr>
<tr>
<td>Odour</td>
<td>Characteristic</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>pH-value at 20 °C:</strong></td>
<td>4.4</td>
</tr>
<tr>
<td><strong>Change in condition</strong></td>
<td></td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>Undetermined</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>Undetermined</td>
</tr>
<tr>
<td><strong>Flash point</strong>:</td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Flammability (solid, gas):</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Decomposition temperature:</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Auto-ignition temperature:</strong></td>
<td>Product is not selfigniting.</td>
</tr>
<tr>
<td><strong>Explosive properties:</strong></td>
<td>Product does not present an explosion hazard.</td>
</tr>
<tr>
<td><strong>Explosion limits:</strong></td>
<td></td>
</tr>
<tr>
<td>Lower</td>
<td>Not determined</td>
</tr>
<tr>
<td>Upper</td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Vapour pressure:</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Density at 20 °C:</strong></td>
<td>&gt;0.6606 g/cm³</td>
</tr>
<tr>
<td><strong>Relative density</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Vapour density</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Evaporation rate</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Solubility in / Miscibility with water:</strong></td>
<td>Not miscible or difficult to mix.</td>
</tr>
<tr>
<td><strong>Partition coefficient: n-octanol/water:</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Viscosity:</strong></td>
<td></td>
</tr>
<tr>
<td>Dynamic</td>
<td>Not determined</td>
</tr>
<tr>
<td>Kinematic</td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Solvent content:</strong></td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td>99.3 %</td>
</tr>
<tr>
<td><strong>Solids content:</strong></td>
<td>&lt;1.0 %</td>
</tr>
</tbody>
</table>
Trade name: 5X APTS Sample Load Buffer

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
    Harmful if swallowed.
  - LD/LC50 values relevant for classification:

<table>
<thead>
<tr>
<th>Compound</th>
<th>LD50</th>
<th>LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>26628-22-8 sodium azide</td>
<td>27 mg/kg (rat)</td>
<td>20 mg/kg (rabbit)</td>
</tr>
</tbody>
</table>

- Primary irritant effect:
  - Skin corrosion/irritation
    Causes skin irritation.
  - Serious eye damage/irritation Based on available data, the classification criteria are not met.
  - Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
  - CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)
    - Germ cell mutagenicity Based on available data, the classification criteria are not met.
    - Carcinogenicity Based on available data, the classification criteria are not met.
    - Reproductive toxicity Based on available data, the classification criteria are not met.
  - STOT-single exposure
    May cause respiratory irritation.
  - STOT-repeated exposure Based on available data, the classification criteria are not met.
  - Aspiration hazard Based on available data, the classification criteria are not met.

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.
Trade name: 5X APTS Sample Load Buffer

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
  - ADR, ADN, IMDG, IATA not regulated

- UN proper shipping name
  - ADR, ADN, IMDG, IATA not regulated

- Transport hazard class(es)
  - ADR, ADN, IMDG, IATA not regulated

- Packing group
  - ADR, 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
  - Directive 2012/18/EU
  - Named dangerous substances - ANNEX I None of the ingredients is listed.
  - REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
  - 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:
- Acute Tox. 4: Acute toxicity – Category 4
- Skin Irrit. 2: Skin corrosion/irritation – Category 2
- STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
- Aquatic Chronic 4: Hazardous to the aquatic environment - long-term aquatic hazard – Category 4