**Agilent Technologies**

**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 Part Number</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>GS96-APTS GlykoPrep APTS Labeling Module, 96-ct</td>
<td>GS96-C2 GlykoPrep APTS Cleanup Module, 96-ct</td>
<td>WS0256</td>
<td>Immobilization Reagent Set</td>
<td>WS0256</td>
</tr>
<tr>
<td></td>
<td></td>
<td>WS0259</td>
<td>GlykoPrep Digestion Reagent Set, 96-ct</td>
<td>WS0295</td>
<td>APTS Catalyst, 325 µl</td>
<td>WS0299</td>
</tr>
<tr>
<td></td>
<td></td>
<td>WS0259</td>
<td>GlykoPrep Digestion Reagent Set, 96-ct</td>
<td>WS0300</td>
<td>Reductant Solution, 325 µl</td>
<td>WS0301-GP</td>
</tr>
<tr>
<td></td>
<td></td>
<td>WS0253</td>
<td>GlykoPrep Digestion (RX) Cartridges</td>
<td>MS1160</td>
<td>Aluminum Sealing Film*</td>
<td>MS1160</td>
</tr>
<tr>
<td></td>
<td></td>
<td>WS0253</td>
<td>GlykoPrep Digestion (RX) Cartridges</td>
<td>MS1160</td>
<td>Aluminum Sealing Film*</td>
<td>MS1160</td>
</tr>
<tr>
<td></td>
<td></td>
<td>WS0255</td>
<td>Blocking Reagent, 6 ml</td>
<td>MS1160</td>
<td>Aluminum Sealing Film*</td>
<td>MS1160</td>
</tr>
<tr>
<td></td>
<td></td>
<td>WS0276</td>
<td>25x Digestion Buffer, 0.7 ml</td>
<td>MS1160</td>
<td>Aluminum Sealing Film*</td>
<td>MS1160</td>
</tr>
<tr>
<td></td>
<td></td>
<td>WS0278</td>
<td>AdvanceBio N-Glycanase, 300 µl</td>
<td>MS1160</td>
<td>Aluminum Sealing Film*</td>
<td>MS1160</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

· Product identifier

· Product name: Denaturation Reagent; Denaturation Reagent, 24-ct
· Product Code: WS0226, WS0226-24, WS0226-GP
· Application of the substance / the mixture

· Details of the supplier of the safety data sheet

· Manufacturer/Supplier:
  Agilent Technologies
  5301 Stevens Creek Blvd
  Santa Clara, CA 95051, USA
· Email: pdl-mlds_author@agilent.com
· Phone number: 800-227-9770
· Emergency telephone number: CHEMTREC®: 1-800-424-9300

2 Hazard(s) identification

· Classification of the substance or mixture

  ![GHS07]
  Acute Tox. 4 H302 Harmful if swallowed.
  Skin Irrit. 2 H315 Causes skin irritation.
  Eye Irrit. 2A H319 Causes serious eye irritation.

· Label elements

  · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
  · Hazard pictograms

  ![GHS07]

· Signal word Warning

· Hazard-determining components of labeling:
  guanidinium chloride

· Hazard statements
  Harmful if swallowed.
  Causes skin irritation.
  Causes serious eye irritation.

· Precautionary statements
  Wash thoroughly after handling.
  Do not eat, drink or smoke when using this product.
  Wear protective gloves/protective clothing/eye protection/face protection.
  If swallowed: Call a doctor if you feel unwell.
  Rinse mouth.
  If on skin: Wash with plenty of soap and water.
  If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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

(Contd. of page 1)

- **If eye irritation persists:** Get medical advice/attention.
- **Store in a closed container.**
- **Store away from other materials.**
- **Dispose of contents/container in accordance with local/regional/national/international regulations.**

**Classification system:**

- **NFPA ratings (scale 0 - 4)**
  - Health = 2
  - Fire = 0
  - Reactivity = 0

- **HMIS-ratings (scale 0 - 4)**
  - Health = 2
  - Fire = 0
  - Reactivity = 0

**Other hazards**

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

### 3 Composition/information on ingredients

- **Chemical characterization:** Mixtures
- **Description:** Mixture of the substances listed below with nonhazardous additions.

**Dangerous components:**

<table>
<thead>
<tr>
<th>Chemical component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>50-01-1 guanidinium chloride</td>
<td>57.3%</td>
</tr>
</tbody>
</table>

### 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:** Immediately call a doctor.
  - **Information for doctor:**
    - Most important symptoms and effects, both acute and delayed: No further relevant information available.
    - Indication of any immediate medical attention and special treatment needed: No further relevant information available.

### 5 Fire-fighting measures

- **Extinguishing media**

  **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.

  **Special hazards arising from the substance or mixture:** No further relevant information available.
Product name: Denaturation Reagent; Denaturation Reagent, 24-ct;

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.
- Protective Action Criteria for Chemicals

<table>
<thead>
<tr>
<th>PAC-1:</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>50-01-1 guanidinium chloride</td>
<td>1.4 mg/m³</td>
<td></td>
</tr>
<tr>
<td>1185-53-1 2-amino-2-(hydroxymethyl)propane-1,3-diolhydrochloride</td>
<td>12 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PAC-2:</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>50-01-1 guanidinium chloride</td>
<td>16 mg/m³</td>
<td></td>
</tr>
<tr>
<td>1185-53-1 2-amino-2-(hydroxymethyl)propane-1,3-diolhydrochloride</td>
<td>130 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PAC-3:</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>50-01-1 guanidinium chloride</td>
<td>94 mg/m³</td>
<td></td>
</tr>
<tr>
<td>1185-53-1 2-amino-2-(hydroxymethyl)propane-1,3-diolhydrochloride</td>
<td>790 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

7 Handling and storage

- Handling:
  - Precautions for safe handling
    Ensure good ventilation/exhaustion at the workplace.
    Prevent formation of aerosols.
  - Information about protection against explosions and fires: 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 receptacle tightly sealed.
  - Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- Additional information about design of technical systems: No further data; see item 7.
· Control parameters

Components with limit values that require monitoring at the workplace:
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Additional information: The lists that were valid during the creation were used as basis.

· Exposure controls

Personal protective equipment:

General protective and hygienic measures:
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.

Breathing equipment:
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

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:

Tightly sealed goggles

9 Physical and chemical properties

· Information on basic physical and chemical properties

General Information

Appearance:

Form: Liquid
Color: According to product specification
Odor: Characteristic
Odor threshold: Not determined.

pH-value at 20 °C (68 °F): 8.8

Change in condition

Melting point/Melting range: Undetermined.
Boiling point/Boiling range: 100 °C (212 °F)

Flash point: Not applicable.
Flammability (solid, gaseous): Not applicable.
Decomposition temperature: Not determined.
Product name: Denaturation Reagent; Denaturation Reagent, 24-ct;

(Contd. of page 4)

- Auto igniting: Product is not selfigniting.
- Danger of explosion: Product does not present an explosion hazard.
- Explosion limits:
  - Lower: Not determined.
  - Upper: Not determined.
- Vapor pressure at 20 °C (68 °F): 23 hPa (17.3 mm Hg)
- Density at 20 °C (68 °F): 0.839 g/cm³ (7.00146 lbs/gal)
- Relative density: Not determined.
- Vapor 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 %
  - VOC content: 0.00 %
- 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:
    - LD/LC50 values that are relevant for classification:
      - 50-01-1 guanidinium chloride
        - Oral LD50 475 mg/kg (rat)
    - Primary irritant effect:
      - on the skin: Irritant to skin and mucous membranes.
      - on the eye: Irritating effect.
      - Sensitization: No sensitizing effects known.
Product name: Denaturation Reagent; Denaturation Reagent, 24-ct;

- Additional toxicological information:
  The product shows the following dangers according to internally approved calculation methods for preparations:
  Harmful
  Irritant

- Carcinogenic categories
  - IARC (International Agency for Research on Cancer)
    None of the ingredients is listed.
  - NTP (National Toxicology Program)
    None of the ingredients is listed.
  - OSHA-Ca (Occupational Safety & Health Administration)
    None of the ingredients is listed.

12 Ecological information

- Toxicity
  - Aquatic toxicity: No further relevant information available.
  - Persistence and degradability: No further relevant information available.

- Behavior 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 (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 of together with household garbage. Do not allow product to reach sewage system.

- Uncleaned packagings:
  - Recommendation: Disposal must be made according to official regulations.

14 Transport information

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

- UN proper shipping name
  - DOT, ADN, IMDG, IATA: not regulated
### Transport hazard class(es)
- DOT, ADN, IMDG, IATA
- Class: not regulated

### Packing group
- DOT, IMDG, IATA
- Class: not regulated

### Environmental hazards:
Not applicable.

### Special precautions for user
Not applicable.

### Transport in bulk according to Annex II of MARPOL73/78 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

- **Sara**
  - Section 355 (extremely hazardous substances):
    None of the ingredients is listed.
  - Section 313 (Specific toxic chemical listings):
    None of the ingredients is listed.
  - TSCA (Toxic Substances Control Act):
    All ingredients are listed.

- **Proposition 65**
  - Chemicals known to cause cancer:
    None of the ingredients is listed.
  - Chemicals known to cause reproductive toxicity for females:
    None of the ingredients is listed.
  - Chemicals known to cause reproductive toxicity for males:
    None of the ingredients is listed.
  - Chemicals known to cause developmental toxicity:
    None of the ingredients is listed.

- **Carcinogenic categories**
  - EPA (Environmental Protection Agency)
    None of the ingredients is listed.
  - TLV (Threshold Limit Value established by ACGIH)
    None of the ingredients is listed.
  - NIOSH-Ca (National Institute for Occupational Safety and Health)
    None of the ingredients is listed.

- **GHS label elements**
The product is classified and labeled according to the Globally Harmonized System (GHS).
Hazard pictograms

GHS07

Signal word Warning

Hazard-determining components of labeling:
guanidinium chloride

Hazard statements
Harmful if swallowed.
Causes skin irritation.
Causes serious eye irritation.

Precautionary statements
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Wear protective gloves/protective clothing/eye protection/face protection.
If swallowed: Call a doctor if you feel unwell.
Rinse mouth.
If on skin: Wash with plenty of soap and water.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.
Store in a closed container.
Store away from other materials.
Dispose of contents/container in accordance with local/regional/national/international regulations.

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
Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
1 Identification

· Product identifier
  · Product name: Finishing Reagent
  · Product Code: WS0229, WS0229-GP
  · 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
    5301 Stevens Creek Blvd
    Santa Clara, CA 95051, USA
  · Email: pdl-msds_author@agilent.com
  · Phone number: 800-227-9770
  · Emergency telephone number: CHEMTREC®: 1-800-424-9300

2 Hazard(s) identification

· Classification of the substance or mixture
  ! GHS07
  Skin Irrit. 2 H315 Causes skin irritation.
  Eye Irrit. 2A H319 Causes serious eye irritation.
  Skin Sens. 1 H317 May cause an allergic skin reaction.

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

· Signal word: Warning
· Hazard statements
  Causes skin irritation.
  Causes serious eye irritation.
  May cause an allergic skin reaction.

· Precautionary statements
  Avoid breathing dust/fume/gas/mist/vapors/spray
  Wear protective gloves/protective clothing/eye protection/face protection.
  If swallowed: Call a doctor if you feel unwell.
  If swallowed: Rinse mouth. Do NOT induce vomiting.
  If on skin: Wash with plenty of soap and water.
  If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.
  If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  Store in accordance with local/regional/national/international regulations.
  Store in a well-ventilated place. Keep container tightly closed.
  Dispose of contents/container in accordance with local/regional/national/international regulations.

(Contd. on page 2)
Product name: Finishing Reagent

Classification system:
- NFPA ratings (scale 0 - 4)
  - Health = 2
  - Fire = 0
  - Reactivity = 0
- HMIS-ratings (scale 0 - 4)
  - HEALTH
  - Fire = 0
  - Reactivity = 0

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

3 Composition/information on ingredients
- Chemical characterization: Mixtures
- Description: Mixture of the substances listed below with nonhazardous additions.

Dangerous components:

<table>
<thead>
<tr>
<th>Chemical</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>64-19-7 acetic acid</td>
<td>10.0%</td>
</tr>
</tbody>
</table>

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.
  - Indication of any immediate medical attention and special treatment needed: No further relevant information available.

5 Fire-fighting measures
- Extinguishing media
- Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- 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.

- Protective Action Criteria for Chemicals

<table>
<thead>
<tr>
<th>PAC-1:</th>
<th>64-19-7 acetic acid</th>
<th>5 ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAC-2:</td>
<td>64-19-7 acetic acid</td>
<td>35 ppm</td>
</tr>
<tr>
<td>PAC-3:</td>
<td>64-19-7 acetic acid</td>
<td>250 ppm</td>
</tr>
</tbody>
</table>

7 Handling and storage

- Handling:

- Precautions for safe handling
  Ensure good ventilation/exhaustion at the workplace.
  Prevent formation of aerosols.

- Information about protection against explosions and fires: 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 receptacle tightly sealed.

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

8 Exposure controls/personal protection

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

- Control parameters

<table>
<thead>
<tr>
<th>Components with limit values that require monitoring at the workplace:</th>
</tr>
</thead>
<tbody>
<tr>
<td>64-19-7 acetic acid</td>
</tr>
<tr>
<td>PEL</td>
</tr>
<tr>
<td>REL</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
Product name: Finishing Reagent

TLV  Short-term value: 37 mg/m³, 15 ppm  
    Long-term value: 25 mg/m³, 10 ppm

- **Additional information**: The lists that were valid during the creation 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.
  - **Breathing equipment**:
    - In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
- **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
    - Color: Colorless
    - Odor: Pungent
    - Odor threshold: Not determined.
  - **pH-value**: Not determined.
- **Change in condition**
  - Melting point/Melting range: Undetermined.
  - Boiling point/Boiling range: 100 °C (212 °F)
- **Flash point**: Not applicable.
- **Flammability (solid, gaseous)**: Not applicable.
- **Ignition temperature**: 485 °C (905 °F)
- ** Decomposition temperature**: Not determined.
Product name: Finishing Reagent

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto igniting</td>
<td>Product is not selfigniting.</td>
</tr>
<tr>
<td>Danger of explosion</td>
<td>Product does not present an explosion hazard.</td>
</tr>
<tr>
<td>Explosion limits</td>
<td></td>
</tr>
<tr>
<td>Lower</td>
<td>4 Vol %</td>
</tr>
<tr>
<td>Upper</td>
<td>17 Vol %</td>
</tr>
<tr>
<td>Vapor pressure at 20 °C (68 °F)</td>
<td>23 hPa (17.3 mm Hg)</td>
</tr>
<tr>
<td>Density at 20 °C (68 °F):</td>
<td>1.00225 g/cm³ (8.36378 lbs/gal)</td>
</tr>
<tr>
<td>Relative density</td>
<td>Not determined.</td>
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<tr>
<td>Vapor density</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Solubility in / Miscibility with Water</td>
<td>Fully miscible.</td>
</tr>
<tr>
<td>Partition coefficient (n-octanol/water)</td>
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<tr>
<td>Viscosity</td>
<td></td>
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<tr>
<td>Dynamic at 20 °C (68 °F):</td>
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<tr>
<td>Kinematic</td>
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<tr>
<td>Solvent content</td>
<td></td>
</tr>
<tr>
<td>Organic solvents</td>
<td>10.0 %</td>
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<tr>
<td>Water</td>
<td>90.0 %</td>
</tr>
<tr>
<td>VOC content</td>
<td>10.00 %</td>
</tr>
<tr>
<td>Solids content</td>
<td>0.0 %</td>
</tr>
<tr>
<td>Other information</td>
<td>No further relevant information available.</td>
</tr>
</tbody>
</table>

10 Stability and reactivity

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

11 Toxicological information

- Information on toxicological effects
- Acute toxicity:
  - Primary irritant effect:
    - on the skin: Irritant to skin and mucous membranes.
    - on the eye: Irritating effect.
  - Sensitization: No sensitizing effects known.
- Additional toxicological information:
  The product shows the following dangers according to internally approved calculation methods for preparations:
  Irritant
Product name: Finishing Reagent

12 Ecological information

- Toxicity
  - Aquatic toxicity: No further relevant information available.
  - Persistence and degradability: No further relevant information available.
- Behavior 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 (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 of together with household garbage. Do not allow product to reach sewage system.
- Uncleaned packagings:
  - Recommendation: Disposal must be made according to official regulations.
  - Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information

- UN-Number
  - DOT, ADN, IMDG, IATA: not regulated
- UN proper shipping name
  - DOT, ADN, IMDG, IATA: not regulated
- Transport hazard class(es)
  - DOT, ADN, IMDG, IATA: not regulated
Product name: Finishing Reagent

- Packing group
  - DOT, IMDG, IATA: not regulated

- Environmental hazards: Not applicable.

- Special precautions for user: Not applicable.

- Transport in bulk according to Annex II of MARPOL73/78 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
  - Sara
    - Section 355 (extremely hazardous substances): None of the ingredients is listed.
    - Section 313 (Specific toxic chemical listings): None of the ingredients is listed.
    - TSCA (Toxic Substances Control Act): All ingredients are listed.

- Proposition 65
  - Chemicals known to cause cancer: None of the ingredients is listed.
  - Chemicals known to cause reproductive toxicity for females: None of the ingredients is listed.
  - Chemicals known to cause reproductive toxicity for males: None of the ingredients is listed.
  - Chemicals known to cause developmental toxicity: None of the ingredients is listed.

- Carcinogenic categories
  - EPA (Environmental Protection Agency) None of the ingredients is listed.
  - TLV (Threshold Limit Value established by ACGIH) None of the ingredients is listed.
  - NIOSH-Ca (National Institute for Occupational Safety and Health) None of the ingredients is listed.

- GHS label elements
  - The product is classified and labeled according to the Globally Harmonized System (GHS).

- Hazard pictograms
  - GHS07

- Signal word Warning
**Product name:** Finishing Reagent

| Hazard statements | 
|---|---|
| Causes skin irritation. |
| Causes serious eye irritation. |
| May cause an allergic skin reaction. |

| Precautionary statements | 
|---|---|
| Avoid breathing dust/fume/gas/mist/vapors/spray |
| Wear protective gloves/protective clothing/eye protection/face protection. |
| If swallowed: Call a doctor if you feel unwell. |
| If swallowed: Rinse mouth. Do NOT induce vomiting. |
| If on skin: Wash with plenty of soap and water. |
| If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. |
| If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| Store in accordance with local/regional/national/international regulations. |
| Store in a well-ventilated place. Keep container tightly closed. |
| Dispose of contents/container in accordance with local/regional/national/international regulations. |

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

### 16 Other information

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

| Abbreviations and acronyms: |
|---|---|
| Skin Irrit. 2: Skin corrosion/irritation – Category 2 |
| Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A |
| Skin Sens. 1: Skin sensitisation – Category 1 |
1 Identification

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

- **Product name:** GlykoPrep Digestion (RX) Cartridges
- **Product Code:** WS0253
- **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, Inc.
    5301 Stevens Creek Blvd
    Santa Clara, CA 95051, USA
  - **Email:** pdl-msds_author@agilent.com
  - **Phone number:** 800-227-9770
  - **Emergency telephone number:** CHEMTREC®: 1-800-424-9300

2 Hazard(s) identification

- **Classification of the substance or mixture**
  The substance is not classified, according to the Globally Harmonized System (GHS).

- **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**
  - **GHS label elements** Void
  - **Hazard pictograms** Void
  - **Signal word** Void
  - **Hazard statements** Void
  - **Precautionary statements**
    Avoid breathing dust/fume/gas/mist/vapors/spray

- **Classification system:**
  - **NFPA ratings (scale 0 - 4)**
    - Health = 0
    - Fire = 0
    - Reactivity = 0

  - **HMIS-ratings (scale 0 - 4)**
    - Health = 0
    - Fire = 0
    - Reactivity = 0

- **Other hazards**
- **Results of PBT and vPvB assessment**
  - **PBT:** Not applicable.
3 Composition/information on ingredients

- Chemical characterization: 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 Fire-fighting measures

- Extinguishing media
- Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- 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.
- Protective Action Criteria for Chemicals
  - PAC-1:
    Substance is not listed.
Product name: GlykoPrep Digestion (RX) Cartridges

7 Handling and storage

· Handling:
  · Precautions for safe handling: Wear protective gloves / eye protection / face protection.
  · Information about protection against explosions and fires: 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 systems: No further data; see item 7.

· Control parameters
  · Components with limit values that require monitoring at the workplace:
    · The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.
    · The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.
    · At this time, the remaining constituent has no known exposure limits.
    · At this time, the other constituents have no known exposure limits.
  · Additional information: The lists that were valid during the creation were used as basis.

· Exposure controls
  · Personal protective equipment:
    · General protective and hygienic measures: The usual precautionary measures for handling chemicals should be followed.
    · Breathing equipment: Not required.
    · Protection of hands:
      · The glove material has to be impermeable and resistant to the product/ substance/ 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
      - Color: According to product specification
    - Odor: Characteristic
    - Odor threshold: Not determined.
  - pH-value: Not applicable.
  - Change in condition
    - Melting point/Melting range: Undetermined.
    - Boiling point/Boiling range: Undetermined.
  - Flash point: Not applicable.
  - Flammability (solid, gaseous): Product is not flammable.
  - Decomposition temperature: Not determined.
  - Auto igniting: Not determined.
  - Danger of explosion: Product does not present an explosion hazard.
  - Explosion limits:
    - Lower: Not determined.
    - Upper: Not determined.
  - Vapor pressure: Not applicable.
  - Density: Not determined.
  - Relative density: Not determined.
  - Vapor density: Not applicable.
  - Evaporation rate: Not applicable.
  - Solubility in / Miscibility with
    - Water: Insoluble.
  - Partition coefficient (n-octanol/water): Not determined.
  - Viscosity:
    - Dynamic: Not applicable.
    - Kinematic: Not applicable.
    - VOC content: 0.00 %
  - 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.
Product name: GlykoPrep Digestion (RX) Cartridges

11 Toxicological information

· Hazardous decomposition products: No dangerous decomposition products known.

· Information on toxicological effects
  · Acute toxicity:
    · Primary irritant effect:
      · on the skin: May be harmful in contact with skin.
      · on the eye: No irritating effect.
    · Sensitization: No sensitizing effects known.
  · Additional toxicological information:
    When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us. The substance is not subject to classification.

· Carcinogenic categories
  · IARC (International Agency for Research on Cancer)
    Substance is not listed.
  · NTP (National Toxicology Program)
    Substance is not listed.
  · OSHA-Ca (Occupational Safety & Health Administration)
    Substance is not listed.

12 Ecological information

· Toxicity
  · Aquatic toxicity: No further relevant information available.
  · Persistence and degradability: No further relevant information available.
  · Behavior 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 (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.
## 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.

<table>
<thead>
<tr>
<th><strong>UN-Number</strong></th>
<th>DOT, ADN, IMDG, IATA</th>
<th>not regulated</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>UN proper shipping name</strong></td>
<td>DOT, ADN, IMDG, IATA</td>
<td>not regulated</td>
</tr>
<tr>
<td><strong>Transport hazard class(es)</strong></td>
<td>DOT, ADN, IMDG, IATA</td>
<td>not regulated</td>
</tr>
<tr>
<td><strong>Class</strong></td>
<td>not regulated</td>
<td></td>
</tr>
<tr>
<td><strong>Packing group</strong></td>
<td>DOT, IMDG, IATA</td>
<td>not regulated</td>
</tr>
<tr>
<td><strong>Environmental hazards:</strong></td>
<td>Not applicable.</td>
<td></td>
</tr>
<tr>
<td><strong>Special precautions for user</strong></td>
<td>Not applicable.</td>
<td></td>
</tr>
<tr>
<td><strong>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</strong></td>
<td>Not applicable.</td>
<td></td>
</tr>
<tr>
<td><strong>UN &quot;Model Regulation&quot;:</strong></td>
<td>not regulated</td>
<td></td>
</tr>
</tbody>
</table>

## 15 Regulatory information

| **Safety, health and environmental regulations/legislation specific for the substance or mixture** |
| **Sara** |
| **Section 355 (extremely hazardous substances):** |
| Substance is not listed. |
| **Section 313 (Specific toxic chemical listings):** |
| Substance is not listed. |
| **TSCA (Toxic Substances Control Act):** |
| Substance is not listed. |
| **TSCA new (21st Century Act): (Substances not listed)** |
| Modified Silica |
| **Proposition 65** |
| **Chemicals known to cause cancer:** |
| Substance is not listed. |
| **Chemicals known to cause reproductive toxicity for females:** |
| Substance is not listed. |
Product name: GlykoPrep Digestion (RX) Cartridges

- **Chemicals known to cause reproductive toxicity for males:**
  Substance is not listed.

- **Chemicals known to cause developmental toxicity:**
  Substance is not listed.

- **Carcinogenic categories**
  - EPA (Environmental Protection Agency)
    Substance is not listed.
  - TLV (Threshold Limit Value established by ACGIH)
    Substance is not listed.
  - NIOSH-Ca (National Institute for Occupational Safety and Health)
    Substance is not listed.

- **GHS label elements** Void
  - Hazard pictograms Void
  - Signal word Void
  - Hazard statements Void
  - Precautionary statements
    Avoid breathing dust/fume/gas/mist/vapors/spray

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

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**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

· Product identifier
  · Product name: Blocking Reagent; Blocking Reagent, 24-ct
  · Product Code: WS0255, WS0255-24, WS0255-GP
  · 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
    5301 Stevens Creek Blvd
    Santa Clara, CA 95051, USA
  · Email: pdl-msds_author@agilent.com
  · Phone number: 800-227-9770
  · Emergency telephone number: CHEMTREC®: 1-800-424-9300

2 Hazard(s) identification

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

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

· Precautionary statements
  Keep away from combustible materials.
  Avoid breathing dust/fume/gas/mist/vapors/spray
  Wash thoroughly after handling.
  Wear protective gloves/protective clothing/eye protection/face protection.
  If swallowed: Rinse mouth. Do NOT induce vomiting.
  If on skin: Wash with plenty of soap and water.
  If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.
  If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  Store in accordance with local/regional/national/international regulations.
  Store away from other materials.
  Dispose of contents/container in accordance with local/regional/national/international regulations.

· Classification system:
  · NFPA ratings (scale 0 - 4)
    Health = 0
    Fire = 0
    Reactivity = 0
  · HMIS-ratings (scale 0 - 4)
    HEALTH 0  Health = 0
    FIRE 0  Fire = 0
    REACTIVITY 0  Reactivity = 0

(Contd. on page 2)
Product name: Blocking Reagent; Blocking Reagent, 24-ct

3 Composition/information on ingredients

- Chemical characterization: Mixtures
- Description: Mixture of the substances listed below with nonhazardous additions.
- Dangerous components: Void

4 First-aid measures

- Description of first aid measures
  - General information: No special measures required.
  - After inhalation: Supply fresh air; consult doctor in case of complaints.
  - After skin contact: Generally the product does not irritate the skin.
  - After eye contact: Rinse opened eye for several minutes under running water.
  - After swallowing: If symptoms persist consult doctor.
- Information for doctor:
  - Most important symptoms and effects, both acute and delayed: No further relevant information available.
  - Indication of any immediate medical attention and special treatment needed: No further relevant information available.

5 Fire-fighting measures

- Extinguishing media
- Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- 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.
- Protective Action Criteria for Chemicals
  PAC-1:
  9003-39-8 Polyvinylpyrrolidone 51 mg/m³
Product name: Blocking Reagent; Blocking Reagent, 24-ct

7 Handling and storage

· Handling:
  · Precautions for safe handling: Wear protective gloves / eye protection / face protection.
  · Information about protection against explosions and fires: 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 systems: No further data; see item 7.

· Control parameters
  · Components with limit values that require monitoring at the workplace:
    The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.
    The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.
    At this time, the remaining constituent has no known exposure limits.
    At this time, the other constituents have no known exposure limits.
  · Additional information: The lists that were valid during the creation were used as basis.

· Exposure controls
  · Personal protective equipment:
    · General protective and hygienic measures: The usual precautionary measures for handling chemicals should be followed.
    · Breathing equipment: Not required.
    · Protection of hands:
      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
      Color: Light yellow
### 48.1.25 · Odor:
- Odor: Characteristic
- Odor threshold: Not determined.

### 48.1.25 · pH-value:
- pH-value: Not determined.

### 48.1.25 · Change in condition
- Melting point/Melting range: Undetermined.
- Boiling point/Boiling range: Undetermined.

### 48.1.25 · Flash point:
- Flash point: Not applicable.

### 48.1.25 · Flammability (solid, gaseous):
- Flammability: Not applicable.

### 48.1.25 · Decomposition temperature:
- Decomposition temperature: Not determined.

### 48.1.25 · Auto igniting:
- Auto igniting: Product is not selfigniting.

### 48.1.25 · Danger of explosion:
- Danger of explosion: Product does not present an explosion hazard.

### 48.1.25 · Explosion limits:
- Lower: Not determined.
- Upper: Not determined.

### 48.1.25 · Vapor pressure:
- Vapor pressure: Not determined.

### 48.1.25 · Density:
- Density: Not determined.
  - Relative density: Not determined.
  - Vapor density: Not determined.
  - Evaporation rate: Not determined.

### 48.1.25 · Solubility in / Miscibility with
- Water: Fully miscible.

### 48.1.25 · Partition coefficient (n-octanol/water):
- Not determined.

### 48.1.25 · Viscosity:
- Dynamic: Not determined.
- Kinematic: Not determined.

### 48.1.25 · Solvent content:
- Water: 99.0 %
- VOC content: 0.00 %

### 48.1.25 · Other information
- No further relevant information available.

---

### 10 Stability and reactivity

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

- Information on toxicological effects
  - Acute toxicity:
    - Primary irritant effect:
      - on the skin: May be harmful in contact with skin.
      - on the eye: No irritating effect.
    - Sensitization: No sensitizing effects known.
  - Additional toxicological information:
    The product is not subject to classification according to internally approved calculation methods for preparations:
    When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

- Carcinogenic categories
  - IARC (International Agency for Research on Cancer)
    9003-39-8 Polyvinylpyrrolidone 3
  - NTP (National Toxicology Program)
    None of the ingredients is listed.
  - OSHA-Ca (Occupational Safety & Health Administration)
    None of the ingredients is listed.

12 Ecological information

- Toxicity
  - Aquatic toxicity: No further relevant information available.
  - Persistence and degradability: No further relevant information available.
  - Behavior 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: Dispose of contents/container in accordance with local/regional/national/international regulations.

- Uncleaned packagings:
  - Recommendation: Disposal must be made according to official regulations.

- Recommended cleansing agent: Water, if necessary with cleansing agents.
# Safety Data Sheet

**acc. to OSHA HCS**

**Revision Date:** 04/25/2019  
**Issue Date:** 04/18/2019

**Product name:** Blocking Reagent; Blocking Reagent, 24-ct

## 14 Transport information

- **UN-Number**
  - DOT, ADN, IMDG, IATA: not regulated

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

- **Transport hazard class(es)**
  - DOT, ADN, IMDG, IATA: not regulated

- **Packing group**
  - DOT, IMDG, IATA: not regulated

- **Environmental hazards:**
  - Not applicable.

- **Special precautions for user**
  - Not applicable.

- **Transport in bulk according to Annex II of MARPOL73/78 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**
  - **Sara**
    - **Section 355 (extremely hazardous substances):**
      - None of the ingredients is listed.
    - **Section 313 (Specific toxic chemical listings):**
      - None of the ingredients is listed.
    - **TSCA (Toxic Substances Control Act):**
      - All ingredients are listed.

- **Proposition 65**
  - **Chemicals known to cause cancer:**
    - None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for females:**
  - None of the ingredients is listed.

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

- **Chemicals known to cause developmental toxicity:**
  - None of the ingredients is listed.

- **Carcinogenic categories**
  - **EPA (Environmental Protection Agency)**
    - None of the ingredients is listed.
  - **TLV (Threshold Limit Value established by ACGIH)**
    - None of the ingredients is listed.
Product name: Blocking Reagent; Blocking Reagent, 24-ct

- NIOSH-Ca (National Institute for Occupational Safety and Health)
  None of the ingredients is listed.
- GHS label elements Void
- Hazard pictograms Void
- Signal word Void
- Hazard statements Void
- Precautionary statements
  Keep away from combustible materials.
  Avoid breathing dust/fume/gas/mist/vapors/spray
  Wash thoroughly after handling.
  Wear protective gloves/protective clothing/eye protection/face protection.
  If swallowed: Rinse mouth. Do NOT induce vomiting.
  If on skin: Wash with plenty of soap and water.
  If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.
  If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  Store in accordance with local/regional/national/international regulations.
  Store away from other materials.
  Dispose of contents/container in accordance with local/regional/national/international regulations.
- 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

- **Product identifier**
  This product is considered an article. This Safety Data Sheet is written based on the encapsulated substance or mixture in this article.
- **Product name:** GlykoPrep Cleanup (CU) Cartridges
- **Product Code:** WS0263
- **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, Inc.
    5301 Stevens Creek Blvd
    Santa Clara, CA 95051, USA
  - **Email:** pdl-msds_author@agilent.com
  - **Phone number:** 800-227-9770
  - **Emergency telephone number:** CHEMTREC®: 1-800-424-9300

2 Hazard(s) identification

- **Classification of the substance or mixture**
  The substance is not classified, according to the Globally Harmonized System (GHS).
- **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**
  - **GHS label elements** Void
  - **Hazard pictograms** Void
  - **Signal word** Void
  - **Hazard statements** Void
  - **Precautionary statements**
    Avoid breathing dust/fume/gas/mist/vapors/spray
  - **Classification system:**
  - **NFPA ratings (scale 0 - 4)**
    Health = 0
    Fire = 0
    Reactivity = 0
  - **HMIS-ratings (scale 0 - 4)**
    Health = 0
    Fire = 0
    Reactivity = 0
- **Other hazards**
  - **Results of PBT and vPvB assessment**
    PBT: Not applicable.
Safety Data Sheet
acc. to OSHA HCS

Revision Date: 05/09/2019  Issue Date: 05/08/2019

Product name: GlykoPrep Cleanup (CU) Cartridges

- vPvB: Not applicable.

3 Composition/information on ingredients

- Chemical characterization: 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 Fire-fighting measures

- Extinguishing media
- Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- 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.
- Protective Action Criteria for Chemicals
  - PAC-1:
    Substance is not listed.
7 Handling and storage

- **Handling:**
  - **Precautions for safe handling:** Wear protective gloves / eye protection / face protection.
  - **Information about protection against explosions and fires:** 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 systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**
  - The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.
  - The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.
  - At this time, the remaining constituent has no known exposure limits.
  - At this time, the other constituents have no known exposure limits.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
  - **General protective and hygienic measures:** The usual precautionary measures for handling chemicals should be followed.
  - **Breathing equipment:** Not required.
  - **Protection of hands:**
    - 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
      - Color: According to product specification
    - Odor: Characteristic
    - Odor threshold: Not determined.
  - pH-value: Not applicable.
  - Change in condition
    - Melting point/Melting range: Undetermined.
    - Boiling point/Boiling range: Undetermined.
  - Flash point: Not applicable.
  - Flammability (solid, gaseous): Product is not flammable.
  - Decomposition temperature: Not determined.
  - Auto igniting: Not determined.
  - Danger of explosion: Product does not present an explosion hazard.
  - Explosion limits:
    - Lower: Not determined.
    - Upper: Not determined.
  - Vapor pressure: Not applicable.
  - Density:
    - Relative density: Not determined.
    - Vapor density: Not applicable.
    - Evaporation rate: Not applicable.
  - Solubility in / Miscibility with
    - Water: Insoluble.
  - Partition coefficient (n-octanol/water): Not determined.
  - Viscosity:
    - Dynamic: Not applicable.
    - Kinematic: Not applicable.
    - VOC content: 0.00 %
  - 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.
Product name: GlykoPrep Cleanup (CU) Cartridges

Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

Information on toxicological effects

Acute toxicity:
  Primary irritant effect:
    on the skin: May be harmful in contact with skin.
    on the eye: No irritating effect.
  Sensitization: No sensitizing effects known.

Additional toxicological information:
When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us. The substance is not subject to classification.

Carcinogenic categories

- IARC (International Agency for Research on Cancer)
  Substance is not listed.

- NTP (National Toxicology Program)
  Substance is not listed.

- OSHA-Ca (Occupational Safety & Health Administration)
  Substance is not listed.

12 Ecological information

Toxicity
  Aquatic toxicity: No further relevant information available.
  Persistence and degradability: No further relevant information available.

Behavior 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 (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.
### 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.

<table>
<thead>
<tr>
<th>· UN-Number</th>
<th>not regulated</th>
</tr>
</thead>
<tbody>
<tr>
<td>· DOT, ADN, IMDG, IATA</td>
<td></td>
</tr>
<tr>
<td>· UN proper shipping name</td>
<td>not regulated</td>
</tr>
<tr>
<td>· DOT, ADN, IMDG, IATA</td>
<td></td>
</tr>
<tr>
<td>· Transport hazard class(es)</td>
<td></td>
</tr>
<tr>
<td>· DOT, ADN, IMDG, IATA</td>
<td>not regulated</td>
</tr>
<tr>
<td>· Class</td>
<td>not regulated</td>
</tr>
<tr>
<td>· Packing group</td>
<td>not regulated</td>
</tr>
<tr>
<td>· DOT, IMDG, IATA</td>
<td></td>
</tr>
<tr>
<td>· Environmental hazards:</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>· Special precautions for user</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>· Transport in bulk according to Annex II of MARPOL73/78 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
  - Sara
    - Section 355 (extremely hazardous substances):
      - Substance is not listed.
    - Section 313 (Specific toxic chemical listings):
      - Substance is not listed.
  - TSCA (Toxic Substances Control Act):
    - Substance is not listed.
  - TSCA new (21st Century Act): (Substances not listed)
    - Modified Silica
  - Proposition 65
    - Chemicals known to cause cancer:
      - Substance is not listed.
    - Chemicals known to cause reproductive toxicity for females:
      - Substance is not listed.
### Product name: GlykoPrep Cleanup (CU) Cartridges

- **Chemicals known to cause reproductive toxicity for males:** Substance is not listed.
- **Chemicals known to cause developmental toxicity:** Substance is not listed.

### Carcinogenic categories

- **EPA (Environmental Protection Agency)** Substance is not listed.
- **TLV (Threshold Limit Value established by ACGIH)** Substance is not listed.
- **NIOSH-Ca (National Institute for Occupational Safety and Health)** Substance is not listed.

### GHS label elements Void
- Hazard pictograms Void
- Signal word Void
- Hazard statements Void
- Precautionary statements
  - Avoid breathing dust/fume/gas/mist/vapors/spray

### 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

- **Product identifier**
  - **Product name:** 25X Digestion Buffer
  - **Product Code:** WS0276, WS0276-GP

- **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
    5301 Stevens Creek Blvd
    Santa Clara, CA 95051, USA
  - **Email:** pdl-msds_author@agilent.com
  - **Phone number:** 800-227-9770
  - **Emergency telephone number:** CHEMTREC®: 1-800-424-9300

## 2 Hazard(s) identification

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

- **Label elements**
  - GHS label elements: Void
  - Hazard pictograms: Void
  - Signal word: Void
  - Hazard statements: Void

- **Precautionary statements**
  - Keep/Store away from clothing/combustible materials.
  - Avoid breathing dust/fume/gas/mist/vapors/spray
  - Wash thoroughly after handling.
  - Avoid release to the environment.
  - Wear protective gloves/protective clothing/eye protection/face protection.
  - If swallowed: Call a doctor if you feel unwell.
  - If swallowed: Rinse mouth. Do NOT induce vomiting.
  - If on skin: Wash with plenty of soap and water.
  - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
  - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  - If skin irritation occurs: Get medical advice/attention.
  - Store in accordance with local/regional/national/international regulations.
  - Store in a closed container.
  - Store away from other materials.
  - Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Classification system**
  - NFPA ratings (scale 0 - 4)
    
    - Health = 0
    - Fire = 0
    - Reactivity = 0

(Contd. on page 2)
Product name: 25X Digestion Buffer

- HMIS-ratings (scale 0 - 4)
  - Health = 0
  - Fire = 0
  - Reactivity = 0
- Other hazards
  - Results of PBT and vPvB assessment
    - PBT: Not applicable.
    - vPvB: Not applicable.

3 Composition/information on ingredients
- Chemical characterization: Mixtures
- Description: Mixture of the substances listed below with nonhazardous additions.
- Dangerous components: Void

4 First-aid measures
- Description of first aid measures
  - General information: No special measures required.
  - After inhalation: Supply fresh air; consult doctor in case of complaints.
  - After skin contact: Generally the product does not irritate the skin.
  - After eye contact: Rinse opened eye for several minutes under running water.
  - After swallowing: If symptoms persist consult doctor.
- Information for doctor:
  - Most important symptoms and effects, both acute and delayed: No further relevant information available.
  - Indication of any immediate medical attention and special treatment needed: No further relevant information available.

5 Fire-fighting measures
- Extinguishing media
  - Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- 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.
Product name: 25X Digestion Buffer

(Contd. of page 2)

7 Handling and storage

Handling:
Precautions for safe handling: Wear protective gloves / eye protection / face protection.
Information about protection against explosions and fires: 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 systems: No further data; see item 7.

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

Exposure controls
Personal protective equipment:
General protective and hygienic measures: The usual precautionary measures for handling chemicals should be followed.
Breathing equipment: Not required.
Protection of hands:
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
### Product name: 25X Digestion Buffer

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Color:</strong></td>
<td>Colorless</td>
</tr>
<tr>
<td>Odor</td>
<td>Odorless</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>pH-value at 20 °C (68 °F):</strong></td>
<td>9.273</td>
</tr>
<tr>
<td><strong>Change in condition</strong></td>
<td></td>
</tr>
<tr>
<td>Melting point/Melting range:</td>
<td>0 °C (32 °F)</td>
</tr>
<tr>
<td>Boiling point/Boiling range:</td>
<td>100 °C (212 °F)</td>
</tr>
<tr>
<td><strong>Flash point:</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Flammability (solid, gaseous):</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Decomposition temperature:</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Auto igniting:</strong></td>
<td>Product is not selfigniting</td>
</tr>
<tr>
<td><strong>Danger of explosion:</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>Vapor pressure at 20 °C (68 °F):</strong></td>
<td>23 hPa (17.3 mm Hg)</td>
</tr>
<tr>
<td><strong>Density at 20 °C (68 °F):</strong></td>
<td>0.98878 g/cm³ (8.25137 lbs/gal)</td>
</tr>
<tr>
<td>Relative density</td>
<td>Not determined</td>
</tr>
<tr>
<td>Vapor density</td>
<td>Not determined</td>
</tr>
<tr>
<td>Evaporation rate</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 at 20 °C (68 °F):</td>
<td>0.952 mPas</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>96.7 %</td>
</tr>
<tr>
<td>VOC content</td>
<td>0.00 %</td>
</tr>
<tr>
<td><strong>Solids content:</strong></td>
<td>0.0 %</td>
</tr>
<tr>
<td><strong>Other information</strong></td>
<td>No further relevant information available</td>
</tr>
</tbody>
</table>

**10 Stability and reactivity**

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

- **Information on toxicological effects**
  - **Acute toxicity:**
  - **Primary irritant effect:**
    - **on the skin:** May be harmful in contact with skin.
    - **on the eye:** No irritating effect.
  - **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
  - The product is not subject to classification according to internally approved calculation methods for preparations.
  - When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

- **Carcinogenic categories**
  - **IARC (International Agency for Research on Cancer)**
    - None of the ingredients is listed.
  - **NTP (National Toxicology Program)**
    - None of the ingredients is listed.
  - **OSHA-Ca (Occupational Safety & Health Administration)**
    - None of the ingredients is listed.

12 Ecological information

- **Toxicity**
  - **Aquatic toxicity:** No further relevant information available.
  - **Persistence and degradability** No further relevant information available.
  - **Behavior 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 (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.
14 Transport information

- **UN-Number**
  - DOT, ADN, IMDG, IATA: not regulated

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

- **Transport hazard class(es)**
  - DOT, ADN, IMDG, IATA: not regulated

- **Packing group**
  - DOT, IMDG, IATA: not regulated

- **Environmental hazards:** Not applicable.

- **Special precautions for user** Not applicable.

- **Transport in bulk according to Annex II of MARPOL73/78 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**
  - **Sara**
    - **Section 355 (extremely hazardous substances):**
      - None of the ingredients is listed.
    - **Section 313 (Specific toxic chemical listings):**
      - None of the ingredients is listed.
  - **TSCA (Toxic Substances Control Act):**
    - All ingredients are listed.
  - **Proposition 65**
    - **Chemicals known to cause cancer:**
      - None of the ingredients is listed.
    - **Chemicals known to cause reproductive toxicity for females:**
      - None of the ingredients is listed.
    - **Chemicals known to cause reproductive toxicity for males:**
      - None of the ingredients is listed.
    - **Chemicals known to cause developmental toxicity:**
      - None of the ingredients is listed.
**Product name: 25X Digestion Buffer**

<table>
<thead>
<tr>
<th>Carcinogenic categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>· EPA (Environmental Protection Agency)</td>
</tr>
<tr>
<td>None of the ingredients is listed.</td>
</tr>
<tr>
<td>· TLV (Threshold Limit Value established by ACGIH)</td>
</tr>
<tr>
<td>None of the ingredients is listed.</td>
</tr>
<tr>
<td>· NIOSH-Ca (National Institute for Occupational Safety and Health)</td>
</tr>
<tr>
<td>None of the ingredients is listed.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GHS label elements</th>
<th>Void</th>
</tr>
</thead>
<tbody>
<tr>
<td>· Hazard pictograms</td>
<td>Void</td>
</tr>
<tr>
<td>· Signal word</td>
<td>Void</td>
</tr>
<tr>
<td>· Hazard statements</td>
<td>Void</td>
</tr>
<tr>
<td>· Precautionary statements</td>
<td></td>
</tr>
<tr>
<td>Keep/Store away from clothing/combustible materials.</td>
<td></td>
</tr>
<tr>
<td>Avoid breathing dust/fume/gas/mist/vapors/spray</td>
<td></td>
</tr>
<tr>
<td>Wash thoroughly after handling.</td>
<td></td>
</tr>
<tr>
<td>Avoid release to the environment.</td>
<td></td>
</tr>
<tr>
<td>Wear protective gloves/protective clothing/eye protection/face protection.</td>
<td></td>
</tr>
<tr>
<td>If swallowed: Call a doctor if you feel unwell.</td>
<td></td>
</tr>
<tr>
<td>If swallowed: Rinse mouth. Do NOT induce vomiting.</td>
<td></td>
</tr>
<tr>
<td>If on skin: Wash with plenty of soap and water.</td>
<td></td>
</tr>
<tr>
<td>IF INHALED: Remove person to fresh air and keep comfortable for breathing.</td>
<td></td>
</tr>
<tr>
<td>If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</td>
<td></td>
</tr>
<tr>
<td>If skin irritation occurs: Get medical advice/attention.</td>
<td></td>
</tr>
<tr>
<td>Store in accordance with local/regional/national/international regulations.</td>
<td></td>
</tr>
<tr>
<td>Store in a closed container.</td>
<td></td>
</tr>
<tr>
<td>Store away from other materials.</td>
<td></td>
</tr>
<tr>
<td>Dispose of contents/container in accordance with local/regional/national/international regulations.</td>
<td></td>
</tr>
</tbody>
</table>

**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

· Product identifier
· Product name: AdvanceBio N-Glycanase; 4x AdvancedBio N-Glycanase (24-ct); Advance Bio N-Glycanase for GlykoPrepPlus
· Product Code: WS0278, WS0278-GP, WS0278-24
· 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
  5301 Stevens Creek Blvd
  Santa Clara, CA 95051, USA
· Email: pdl-msds_author@agilent.com
· Phone number: 800-227-9770
· Emergency telephone number: CHEMTREC®: 1-800-424-9300

2 Hazard(s) identification

· Classification of the substance or mixture
  · 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
  · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
  · Hazard pictograms

· Signal word Danger
· Hazard statements
  May cause allergy or asthma symptoms or breathing difficulties if inhaled.
  May cause an allergic skin reaction.
· Precautionary statements
  Avoid breathing dust/fume/gas/mist/vapors/spray
  Contaminated work clothing must not be allowed out of the workplace.
  Wear protective gloves/protective clothing/eye protection/face protection.
  In case of inadequate ventilation wear respiratory protection.
  If swallowed: Call a doctor if you feel unwell.
  If swallowed: Rinse mouth. Do NOT induce vomiting.
If on skin: Wash with plenty of soap and water.
If inhaled: Remove person to fresh air and keep comfortable for breathing.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Take off contaminated clothing and wash it before reuse.
If skin irritation or rash occurs: Get medical advice/attention.
Specific treatment (see on this label).
Wash contaminated clothing before reuse.
Collect spillage.
Store in accordance with local/regional/national/international regulations.
Store in a well-ventilated place. Keep cool.
Store away from other materials.
Dispose of contents/container in accordance with local/regional/national/international regulations.

Classification system:
NFPA ratings (scale 0 - 4)
- Health = 0
- Fire = 0
- Reactivity = 0

HMIS-ratings (scale 0 - 4)
- Health = 0
- Fire = 0
- Reactivity = 0

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

Composition/information on ingredients
- Chemical characterization: Mixtures
- Description: Mixture of the substances listed below with nonhazardous additions.
- Dangerous components: Void

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

5 Fire-fighting measures

· Extinguishing media
  · Suitable extinguishing agents: Use fire fighting measures that suit the environment.
  · 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.

· Protective Action Criteria for Chemicals
  PAC-1: 1185-53-1 2-amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride 12 mg/m³
  PAC-2: 1185-53-1 2-amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride 130 mg/m³
  PAC-3: 1185-53-1 2-amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride 790 mg/m³

7 Handling and storage

· Handling:
  · Precautions for safe handling
    Ensure good ventilation/exhaustion at the workplace.
    Prevent formation of aerosols.
  · Information about protection against explosions and fires: 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.
Product name: AdvanceBio N-Glycanase; 4x AdvancedBio N-Glycanase (24-ct); Advance Bio N-Glycanase for GlykoPrepPlus

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

8 Exposure controls/personal protection

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

Control parameters

Components with limit values that require monitoring at the workplace:
The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.
The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.
At this time, the remaining constituent has no known exposure limits.
At this time, the other constituents have no known exposure limits.

Additional information: The lists that were valid during the creation 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.

Breathing equipment:
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

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: Wear eye protection / face protection.

9 Physical and chemical properties

Information on basic physical and chemical properties

General Information

Appearance:
Form: Liquid
Color: Clear
Odor: Characteristic
Odor threshold: Not determined.

pH-value at 20 °C (68 °F): 7.5

Change in condition
Melting point/Melting range: Undetermined.
Boiling point/Boiling range: Undetermined.
Product name: AdvanceBio N-Glycanase; 4x AdvancedBio N-Glycanase (24-ct); Advance Bio N-Glycanase for GlykoPrepPlus

- Flash point: Not applicable.
- Flammability (solid, gaseous): Not applicable.
- Decomposition temperature: Not determined.
- Auto igniting: Product is not selfigniting.
- Danger of explosion: Product does not present an explosion hazard.
- Explosion limits:
  - Lower: Not determined.
  - Upper: Not determined.
- Vapor pressure at 20 °C (68 °F): 23 hPa (17.3 mm Hg)
- Density: Not determined.
- Relative density: Not determined.
- Vapor 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: 99.3 %
  - VOC content: 0.00 %
- Solids content: 0.7 %
- Other information: No further relevant information available.

10 Stability and reactivity

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

11 Toxicological information

- Information on toxicological effects:
  - Acute toxicity:
  - Primary irritant effect:
  - on the skin: May be harmful in contact with skin.

(Contd. of page 4)
**Product name:** AdvanceBio N-Glycanase; 4x AdvancedBio N-Glycanase (24-ct); Advance Bio N-Glycanase for GlykoPrepPlus

- **on the eye:** No irritating effect.
- **Sensitization:**
  - Sensitization possible through inhalation.
  - Sensitization possible through skin contact.
- **Additional toxicological information:**
  - The product shows the following dangers according to internally approved calculation methods for preparations:
    - Harmful
    - Irritant

<table>
<thead>
<tr>
<th>Carcinogenic categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>IARC (International Agency for Research on Cancer)</td>
</tr>
<tr>
<td>None of the ingredients is listed.</td>
</tr>
<tr>
<td>NTP (National Toxicology Program)</td>
</tr>
<tr>
<td>None of the ingredients is listed.</td>
</tr>
<tr>
<td>OSHA-Ca (Occupational Safety &amp; Health Administration)</td>
</tr>
<tr>
<td>None of the ingredients is listed.</td>
</tr>
</tbody>
</table>

**12 Ecological information**

<table>
<thead>
<tr>
<th>Toxicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aquatic toxicity: No further relevant information available.</td>
</tr>
<tr>
<td>Persistence and degradability: No further relevant information available.</td>
</tr>
<tr>
<td>Behavior in environmental systems:</td>
</tr>
<tr>
<td>Bioaccumulative potential: No further relevant information available.</td>
</tr>
<tr>
<td>Mobility in soil: No further relevant information available.</td>
</tr>
<tr>
<td>Additional ecological information:</td>
</tr>
<tr>
<td>General notes: Not hazardous for water.</td>
</tr>
<tr>
<td>Results of PBT and vPvB assessment</td>
</tr>
<tr>
<td>PBT: Not applicable.</td>
</tr>
<tr>
<td>vPvB: Not applicable.</td>
</tr>
<tr>
<td>Other adverse effects: No further relevant information available.</td>
</tr>
</tbody>
</table>

**13 Disposal considerations**

- **Waste treatment methods**
- **Recommendation:** Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

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

**14 Transport information**

- **UN-Number**
- **DOT, ADN, IMDG, IATA**
  - not regulated
Product 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
  · Sara
    · Section 355 (extremely hazardous substances):
      None of the ingredients is listed.
    · Section 313 (Specific toxic chemical listings):
      None of the ingredients is listed.
    · TSCA (Toxic Substances Control Act):
      1185-53-1 2-amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride
      7647-14-5 sodium chloride
      7732-18-5 water, distilled, conductivity or of similar purity
    · Proposition 65
      · Chemicals known to cause cancer:
        None of the ingredients is listed.
      · Chemicals known to cause reproductive toxicity for females:
        None of the ingredients is listed.
      · Chemicals known to cause reproductive toxicity for males:
        None of the ingredients is listed.
      · Chemicals known to cause developmental toxicity:
        None of the ingredients is listed.
    · Carcinogenic categories
      · EPA (Environmental Protection Agency)
        None of the ingredients is listed.
      · TLV (Threshold Limit Value established by ACGIH)
        None of the ingredients is listed.
Product name: AdvanceBio N-Glycanase; 4x AdvancedBio N-Glycanase (24-ct); Advance Bio N-Glycanase for GlykoPrepPlus

- NIOSH-Ca (National Institute for Occupational Safety and Health)
  - None of the ingredients is listed.

- GHS label elements
  - The product is classified and labeled according to the Globally Harmonized System (GHS).

- Hazard pictograms
  - GHS08

- Signal word
  - Danger

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

- Precautionary statements
  - Avoid breathing dust/fume/gas/mist/vapors/spray
  - Contaminated work clothing must not be allowed out of the workplace.
  - Wear protective gloves/protective clothing/eye protection/face protection.
  - In case of inadequate ventilation wear respiratory protection.
  - If swallowed: Call a doctor if you feel unwell.
  - If swallowed: Rinse mouth. Do NOT induce vomiting.
  - If on skin: Wash with plenty of soap and water.
  - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
  - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  - Take off contaminated clothing and wash it before reuse.
  - If skin irritation or rash occurs: Get medical advice/attention.
  - Specific treatment (see on this label).
  - Wash contaminated clothing before reuse.
  - Collect spillage.
  - Store in accordance with local/regional/national/international regulations.
  - Store in a well-ventilated place. Keep cool.
  - Store away from other materials.
  - Dispose of contents/container in accordance with local/regional/national/international regulations.

- 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

· Product identifier
  · Product name: APTS Catalyst; APTS Catalyst, 24-ct
  · Product Code: WS0295, WS0295-24

· 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
    5301 Stevens Creek Blvd
    Santa Clara, CA 95051, USA
  · Email: pdl-msds_author@agilent.com
  · Phone number: 800-227-9770
  · Emergency telephone number: CHEMTREC®: 1-800-424-9300

2 Hazard(s) identification

· Classification of the substance or mixture

  GHS01 Exploding bomb

  GHS02 Flame
  Flam. Liq.  3  H226  Flammable liquid and vapor.

  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.

· Label elements
  · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
**Product name:** APTS Catalyst; APTS Catalyst, 24-ct

- **Hazard pictograms**

<table>
<thead>
<tr>
<th>GHS01</th>
<th>GHS02</th>
<th>GHS05</th>
<th>GHS07</th>
<th>GHS08</th>
</tr>
</thead>
</table>

- **Signal word** Danger

- **Hazard-determining components of labeling:**
  - difluoroacetic acid

- **Hazard statements**
  - Unstable explosive.
  - Flammable liquid and vapor.
  - Harmful if swallowed or in contact with skin.
  - Causes severe skin burns and eye damage.
  - May cause allergy or asthma symptoms or breathing difficulties if inhaled.
  - May cause respiratory irritation.

- **Precautionary statements**
  - Obtain special instructions before use.
  - Do not handle until all safety precautions have been read and understood.
  - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
  - Ground/bond container and receiving equipment.
  - Use explosion-proof electrical/ventilating/lighting/equipment.
  - Use only non-sparking tools.
  - Take precautionary measures against static discharge.
  - Do not breathe dusts or mists.
  - Wash thoroughly after handling.
  - Do not eat, drink or smoke when using this product.
  - Use only outdoors or in a well-ventilated area.
  - Wear protective gloves/protective clothing/eye protection/face protection.
  - Wear personal protective equipment/face protection.
  - [In case of inadequate ventilation] wear respiratory protection.
  - If swallowed: Call a poison center/doctor if you feel unwell.
  - If swallowed: Rinse mouth. Do NOT induce vomiting.
  - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
  - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
  - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  - Immediately call a poison center/doctor.
  - Specific treatment (see on this label).
  - Take off contaminated clothing and wash it before reuse.
  - If experiencing respiratory symptoms: Call a poison center/doctor.
  - Wash contaminated clothing before reuse.
  - In case of fire: Use for extinction: CO2, powder or water spray.
  - Explosion risk in case of fire.
  - DO NOT fight fire when fire reaches explosives.
  - Evacuate area.
  - Store in accordance with local/regional/national/international regulations.
  - Store in a well-ventilated place. Keep container tightly closed.
  - Store in a well-ventilated place. Keep cool.
  - Store locked up.
  - Dispose of contents/container in accordance with local/regional/national/international regulations.
Product name: APTS Catalyst; APTS Catalyst, 24-ct

Classification system:
- NFPA ratings (scale 0 - 4)
  - Health = 3
  - Fire = 2
  - Reactivity = 4

- HMIS-ratings (scale 0 - 4)
  - Health = *3
  - Fire = 2
  - Reactivity = 4

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

3 Composition/information on ingredients
- Chemical characterization: Mixtures
- Description: Mixture of the substances listed below with nonhazardous additions.
- Dangerous components:
  - 67-68-5 dimethyl sulfoxide 75.0%
  - 381-73-7 difluoroacetic acid 25.0%

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 copious amounts of water and provide fresh air. Immediately call a doctor.
- Information for doctor:
  - Most important symptoms and effects, both acute and delayed No further relevant information available.
  - Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures
- Extinguishing media
- Suitable extinguishing agents:
  - CO2, extinguishing 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.
- Advice for firefighters
- Protective equipment: No special measures required.
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 neutralizing 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.

- **Protective Action Criteria for Chemicals**

  **PAC-1:**
  67-68-5 dimethyl sulfoxide 150 ppm

  **PAC-2:**
  67-68-5 dimethyl sulfoxide 290 ppm

  **PAC-3:**
  67-68-5 dimethyl sulfoxide 1,800 ppm

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 protection against explosions and fires:**
    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 receptacle 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 systems:** No further data; see item 7.

- **Control parameters**
  - **Components with limit values that require monitoring at the workplace:**
    The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.
The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the remaining constituent has no known exposure limits. At this time, the other constituents have no known exposure limits.

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Exposure limits</th>
<th>Additional information</th>
</tr>
</thead>
<tbody>
<tr>
<td>67-68-5 dimethyl sulfoxide</td>
<td>WEEL Long-term value: 250 ppm</td>
<td>The lists that were valid during the creation were used as basis.</td>
</tr>
</tbody>
</table>

**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.
  - **Breathing equipment:**
    - In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

- **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
      - **Color:** Clear
      - **Odor:** Acrid
      - **Odor threshold:** Not determined.
    - **pH-value:** Not determined.
  - **Change in condition**
    - **Melting point/Melting range:** Undetermined.
    - **Boiling point/Boiling range:** Undetermined.
  - **Flash point:** 78 °C (172.4 °F)
  - **Flammability (solid, gaseous):** Not applicable.
Product name: APTS Catalyst; APTS Catalyst, 24-ct

- Decomposition temperature: Not determined.
- Auto igniting: Product is not selfigniting.
- Danger of explosion: Risk of explosion by shock, friction, fire or other sources of ignition.
  - Explosion limits:
    - Lower: Not determined.
    - Upper: Not determined.
- Vapor pressure: Not determined.
- Density: Not determined.
- Relative density: Not determined.
- Vapor 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:
  - Organic solvents: 75.0 %
  - VOC content: 75.00 %
- 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:
  - LD/LC50 values that are relevant for classification:
    - 67-68-5 dimethyl sulfoxide
      - Oral LD50 14,500 mg/kg (rat)
      - Dermal LD50 >5,000 mg/kg (rabbit)
      - Inhalative LC50/4 h 40,250 mg/l (rat)

- Primary irritant effect:
  - on the skin: Caustic effect on skin and mucous membranes.
Product name: APTS Catalyst; APTS Catalyst, 24-ct

Know of the eye: Strong caustic effect.
• Sensitization: No sensitizing effects known.

• Additional toxicological information:
The product shows the following dangers according to internally approved calculation methods for preparations:
  - Corrosive
  - Irritant
    - Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

• Carcinogenic categories
  - IARC (International Agency for Research on Cancer)
    - None of the ingredients is listed.
  - NTP (National Toxicology Program)
    - None of the ingredients is listed.
  - OSHA-Ca (Occupational Safety & Health Administration)
    - None of the ingredients is listed.

12 Ecological information

• Toxicity
  - Aquatic toxicity:
    - 67-68-5 dimethyl sulfoxide
      - EC50 $\text{mg/kg (daphnia)}$

• Persistence and degradability
  - No further relevant information available.

• Behavior 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 (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 bodies of water or drainage ditch undiluted or unneutralized.

• 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 of together with household garbage. Do not allow product to reach sewage system.

• Uncleaned packagings:
  - Recommendation: Disposal must be made according to official regulations.
14 Transport information

- Not Regulated, De minimis Quantities

- **UN-Number**
  - DOT, ADN, IMDG, IATA: not regulated

- **DOT proper shipping name**
  - DOT, ADN, IMDG, IATA: not regulated

- **Transport hazard class(es)**
  - DOT, ADN, IMDG, IATA: not regulated

- **Packing group**
  - DOT, IMDG, IATA: not regulated

- **Environmental hazards**: Not applicable.

- **Special precautions for user**: Not applicable.

- **Transport in bulk according to Annex II of MARPOL73/78 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

  - **Sara**
    - Section 355 (extremely hazardous substances):
      - None of the ingredients is listed.
    - Section 313 (Specific toxic chemical listings):
      - None of the ingredients is listed.
    - TSCA (Toxic Substances Control Act):
      - All ingredients are listed.
    - TSCA new (21st Century Act): (Substances not listed)
      - 381-73-7 difluoroacetic acid

  - Proposition 65
    - Chemicals known to cause cancer:
      - None of the ingredients is listed.
    - Chemicals known to cause reproductive toxicity for females:
      - None of the ingredients is listed.
    - Chemicals known to cause reproductive toxicity for males:
      - None of the ingredients is listed.
    - Chemicals known to cause developmental toxicity:
      - None of the ingredients is listed.
· Carcinogenic categories

· EPA (Environmental Protection Agency)
  None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)
  None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)
  None of the ingredients is listed.

· GHS label elements
  The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms
  ![GHS pictograms]

· Signal word
  Danger

· Hazard-determining components of labeling:
  difluoroacetic acid

· Hazard statements
  Unstable explosive.
  Flammable liquid and vapor.
  Harmful if swallowed or in contact with skin.
  Causes severe skin burns and eye damage.
  May cause allergy or asthma symptoms or breathing difficulties if inhaled.
  May cause respiratory irritation.

· Precautionary statements
  Obtain special instructions before use.
  Do not handle until all safety precautions have been read and understood.
  Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
  Ground/bond container and receiving equipment.
  Use explosion-proof electrical/ventilating/lighting/equipment.
  Use only non-sparking tools.
  Take precautionary measures against static discharge.
  Do not breathe dusts or mists.
  Wash thoroughly after handling.
  Do not eat, drink or smoke when using this product.
  Use only outdoors or in a well-ventilated area.
  Wear protective gloves/protective clothing/eye protection/face protection.
  Wear personal protective equipment/face protection.
  [In case of inadequate ventilation] wear respiratory protection.
  If swallowed: Call a poison center/doctor if you feel unwell.
  If swallowed: Rinse mouth. Do NOT induce vomiting.
  If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
  IF INHALED: Remove person to fresh air and keep comfortable for breathing.
  If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  Immediately call a poison center/doctor.
  Specific treatment (see on this label).
  Take off contaminated clothing and wash it before reuse.
  If experiencing respiratory symptoms: Call a poison center/doctor.
  Wash contaminated clothing before reuse.
  In case of fire: Use for extinction: CO2, powder or water spray.
  Explosion risk in case of fire.
  DO NOT fight fire when fire reaches explosives.

(Contd. of page 8)
Product name: APTS Catalyst; APTS Catalyst, 24-ct

Evacuate area.
Store in accordance with local/regional/national/international regulations.
Store in a well-ventilated place. Keep container tightly closed.
Store in a well-ventilated place. Keep cool.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.

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:
Unst. Expl.: Explosives – Unstable explosive
Flam. Lq. 3: Flammable liquids – Category 3
Acute Tox. 4: Acute toxicity – Category 4
Skin Corr. 1B: Skin corrosion/irritation – Category 1B
Resp. Sens. 1B: Respiratory sensitisation – Category 1B
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
1 Identification

· Product identifier
  · Product name: APTS Solution; APTS Solution, 24-ct
  · Product Code: WS0299, WS0299-24
  · 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
    5301 Stevens Creek Blvd
    Santa Clara, CA 95051, USA
  · Email: pdl-msds_author@agilent.com
  · Phone number: 800-227-9770
  · Emergency telephone number: CHEMTREC®: 1-800-424-9300

2 Hazard(s) identification

· Classification of the substance or mixture

GHS07

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

· Label elements
  · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
  · Hazard pictograms

GHS07

· Signal word Warning

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

· Hazard statements
  Causes skin irritation.
  Causes serious eye irritation.
  May cause respiratory irritation.

· Precautionary statements
  Avoid breathing dust/fume/gas/mist/vapors/spray
  Wash thoroughly after handling.
  Use only outdoors or in a well-ventilated area.
  Wear protective gloves / eye protection / face protection.
  If swallowed: Call a doctor if you feel unwell.
  If swallowed: Rinse mouth. Do NOT induce vomiting.
  If on skin: Wash with plenty of soap and water.

(Contd. on page 2)
48.1.25

IF INHALED: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation occurs: Get medical advice/attention. Store in accordance with local/regional/national/international regulations. Store in a closed container. Store locked up. Dispose of contents/container in accordance with local/regional/national/international regulations.

Classification system:

NFPA ratings (scale 0 - 4)

Health = 2  
Fire = 0  
Reactivity = 0

HMIS-ratings (scale 0 - 4)

Health = 2  
Fire = 0  
Reactivity = 0

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

3 Composition/information on ingredients

Chemical characterization: Mixtures
Description: Mixture of the substances listed below with nonhazardous additions.

Dangerous components:

<table>
<thead>
<tr>
<th>Substance</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>196504-57-1 8-aminopyrene-1,3,6-trisulfonic acidtrisodium salt</td>
<td>22.2%</td>
</tr>
</tbody>
</table>

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.
Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

Extinguishing media
Suitable extinguishing agents: Use fire fighting measures that suit the environment.
Special hazards arising from the substance or mixture No further relevant information available.
Product name: APTS Solution; APTS Solution, 24-ct

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.
- Protective Action Criteria for Chemicals

  - PAC-1:
    None of the ingredients is listed.

  - PAC-2:
    None of the ingredients is listed.

  - PAC-3:
    None of the ingredients is listed.

7 Handling and storage

- Handling:
  Precautions for safe handling
  Ensure good ventilation/exhaustion at the workplace.
  Prevent formation of aerosols.
- Information about protection against explosions and fires: 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 receptacle tightly sealed.
- Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- Additional information about design of technical systems: No further data; see item 7.
- Control parameters
- Components with limit values that require monitoring at the workplace:
  The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- Additional information: The lists that were valid during the creation were used as basis.
Product name: APTS Solution; APTS Solution, 24-ct

· 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.
  · Breathing equipment:
    In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
  · 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
    Color: Orange
  · Odor: Characteristic
  · Odor threshold: Not determined.
  · pH-value: Not determined.

· Change in condition
  · Melting point/Melting range: Undetermined.
  · Boiling point/Boiling range: 100 °C (212 °F)

· Flash point: Not applicable.

· Flammability (solid, gaseous): Not applicable.

· Decomposition temperature: Not determined.

· Auto igniting: Product is not selfigniting.

· Danger of explosion: Product does not present an explosion hazard.
# Safety Data Sheet

**acc. to OSHA HCS**

**Revision Date:** 05/01/2019  
**Issue Date:** 01/29/2019

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

## 48.1.25

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

- **Vapor pressure at 20 °C (68 °F):** 23 hPa (17.3 mm Hg)

- **Density:** Not determined.
  - Relative density: Not determined.
  - Vapor 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 %
  - VOC content: 0.00 %
  - 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:
    - Primary irritant effect:
      - on the skin: Irritant to skin and mucous membranes.
      - on the eye: Irritating effect.
      - Sensitization: No sensitizing effects known.
  - Additional toxicological information: The product shows the following dangers according to internally approved calculation methods for preparations:
    - Irritant

- **Carcinogenic categories**
  - IARC (International Agency for Research on Cancer)
    - None of the ingredients is listed.
Product 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.
- Behavior 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 (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 of together with household garbage. Do not allow product to reach sewage system.
- Uncleaned packagings:
  - Recommendation: Disposal must be made according to official regulations.
- Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information

Not Regulated, De minimis Quantities

- UN-Number
  - DOT, ADN, IMDG, IATA: not regulated
- UN proper shipping name
  - DOT, ADN, IMDG, IATA: not regulated
- Transport hazard class(es)
  - DOT, ADN, IMDG, IATA: not regulated
- Packing group
  - DOT, IMDG, IATA: not regulated
Product name: APTS Solution; APTS Solution, 24-ct

48.1.25

- Environmental hazards: Not applicable.
- Special precautions for user: Not applicable.
- Transport in bulk according to Annex II of MARPOL73/78 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
  - Sara
    - Section 355 (extremely hazardous substances):
      None of the ingredients is listed.
    - Section 313 (Specific toxic chemical listings):
      None of the ingredients is listed.
  - TSCA (Toxic Substances Control Act):
    - 7732-18-5 water, distilled, conductivity or of similar purity
    - TSCA new (21st Century Act): (Substances not listed)
      196504-57-1 8-aminopyrene-1,3,6-trisulfonic acidtrisodium salt
  - Proposition 65
    - Chemicals known to cause cancer:
      None of the ingredients is listed.
    - Chemicals known to cause reproductive toxicity for females:
      None of the ingredients is listed.
    - Chemicals known to cause reproductive toxicity for males:
      None of the ingredients is listed.
    - Chemicals known to cause developmental toxicity:
      None of the ingredients is listed.
  - Carcinogenic categories
    - EPA (Environmental Protection Agency)
      None of the ingredients is listed.
    - TLV (Threshold Limit Value established by ACGIH)
      None of the ingredients is listed.
    - NIOSH-Ca (National Institute for Occupational Safety and Health)
      None of the ingredients is listed.
  - GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
    - Hazard pictograms
      GHS07
  - Signal word Warning
Product name: APTS Solution; APTS Solution, 24-ct

- **Hazard-determining components of labeling:**
  8-aminopyrene-1,3,6-trisulfonic acidtrisodium salt
- **Hazard statements**
  Causes skin irritation.
  Causes serious eye irritation.
  May cause respiratory irritation.
- **Precautionary statements**
  Avoid breathing dust/fume/gas/mist/vapors/spray.
  Wash thoroughly after handling.
  Use only outdoors or in a well-ventilated area.
  Wear protective gloves / eye protection / face protection.
  If swallowed: Call a doctor if you feel unwell.
  If swallowed: Rinse mouth. Do NOT induce vomiting.
  If on skin: Wash with plenty of soap and water.
  IF INHALED: Remove person to fresh air and keep comfortable for breathing.
  If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  If skin irritation occurs: Get medical advice/attention.
  Store in accordance with local/regional/national/international regulations.
  Store in a closed container.
  Store locked up.
  Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

**16 Other information**

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

- **Abbreviations and acronyms:**
  Skin Irrit. 2: Skin corrosion/irritation – Category 2
  Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
  STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
1 Identification

· Product identifier
  · Product name: Reductant Solution
  · Product Code: WS0300, WS0300-24
  · 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
    5301 Stevens Creek Blvd
    Santa Clara, CA 95051, USA
  · Email: pdl-msds_author@agilent.com
  · Phone number: 800-227-9770
  · Emergency telephone number: CHEMTREC®: 1-800-424-9300

2 Hazard(s) identification

· Classification of the substance or mixture
  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.

  GHS07
  STOT SE 3 H335 May cause respiratory irritation.

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

  GHS05 GHS06 GHS07

· Signal word: Danger
· Hazard-determining components of labeling:
  sodium cyanoborohydride
· Hazard statements
  Fatal if swallowed or in contact with skin.

(Contd. on page 2)
48.1.25
Causes severe skin burns and eye damage. May cause respiratory irritation.

Precautionary statements
Do not allow contact with air. Handle under inert gas. Protect from moisture. Do not breathe dusts or mists. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. [In case of inadequate ventilation] wear respiratory protection. If swallowed: Call a doctor if you feel unwell. If swallowed: Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Specific treatment (see on this label).

Take off immediately all contaminated clothing and wash it before reuse. Collect spillage. Store in a well-ventilated place. Keep container tightly closed. Store locked up. Dispose of contents/container in accordance with local/regional/national/international regulations.

Classification system:

NFPA ratings (scale 0 - 4)

<table>
<thead>
<tr>
<th>Health</th>
<th>Fire</th>
<th>Reactivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

HMIS-ratings (scale 0 - 4)

<table>
<thead>
<tr>
<th>HEALTH</th>
<th>FIRE</th>
<th>REACTIVITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>*3</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

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

3 Composition/information on ingredients

Chemical characterization: Mixtures
Description: Mixture of the substances listed below with nonhazardous additions.

Dangerous components:

<table>
<thead>
<tr>
<th>Substance</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>dimethyl sulfoxide (67-68-5)</td>
<td>86.0%</td>
</tr>
<tr>
<td>sodium cyanborohydride (25895-60-7)</td>
<td>14.0%</td>
</tr>
</tbody>
</table>
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 copious amounts of water and provide fresh air. Immediately call a doctor.
  - Information for doctor:
    - Most important symptoms and effects, both acute and delayed: No further relevant information available.
    - Indication of any immediate medical attention and special treatment needed: No further relevant information available.

5 Fire-fighting measures

- Extinguishing media
- Suitable extinguishing agents:
  - Sand. Do not use water.
  - Use fire fighting measures that suit the environment.
- 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 respirator 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).
  - Use neutralizing 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.
- Protective Action Criteria for Chemicals

<table>
<thead>
<tr>
<th>PAC-1:</th>
<th>67-68-5 dimethyl sulfoxide</th>
<th>150 ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAC-2:</td>
<td>67-68-5 dimethyl sulfoxide</td>
<td>290 ppm</td>
</tr>
<tr>
<td>PAC-3:</td>
<td>67-68-5 dimethyl sulfoxide</td>
<td>1,800 ppm</td>
</tr>
</tbody>
</table>
7 Handling and storage

- Handling:
  - Precautions for safe handling
    Ensure good ventilation/exhaustion at the workplace.
    Prevent formation of aerosols.
  - Information about protection against explosions and fires: 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 receptacle 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 systems: No further data; see item 7.
- Control parameters
- Components with limit values that require monitoring at the workplace:
  The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.
  The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.
  At this time, the remaining constituent has no known exposure limits.
  At this time, the other constituents have no known exposure limits.

<table>
<thead>
<tr>
<th>67-68-5 dimethyl sulfoxide</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEEL</td>
</tr>
</tbody>
</table>

- Additional information: The lists that were valid during the creation 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.
  - Breathing equipment:
    In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
  - 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.
9 Physical and chemical properties

- **Information on basic physical and chemical properties**
  - **General Information**
    - **Appearance:**
      - Form: Liquid
      - Color: Colorless
      - Odor: Characteristic
      - Odor threshold: Not determined.
    - **pH-value:** Not determined.
    - **Change in condition**
      - Melting point/Melting range: Undetermined.
      - Boiling point/Boiling range: Undetermined.
    - **Flash point:** Not applicable.
    - **Flammability (solid, gaseous):** Not applicable.
    - **Decomposition temperature:** Not determined.
    - **Auto-igniting:** Product is not self-igniting.
    - **Danger of explosion:** Product does not present an explosion hazard.
  - **Explosion limits:**
    - Lower: Not determined.
    - Upper: Not determined.
  - **Vapor pressure:** Not determined.
  - **Density:**
    - Relative density: Not determined.
    - Vapor 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:**
    - Organic solvents: 86.0 %
    - VOC content: 86.00 %
  - Solids content: 14.0 %
Product name: Reductant Solution

10 Stability and reactivity

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

11 Toxicological information

- Information on toxicological effects
  - Acute toxicity:
    - LD/LC50 values that are relevant for classification:
      67-68-5 dimethyl sulfoxide
      - Oral LD50: 14,500 mg/kg (rat)
      - Dermal LD50: >5,000 mg/kg (rabbit)
      - Inhalative LC50/4 h: 40,250 mg/l (rat)
    - Primary irritant effect:
      - on the skin: Caustic effect on skin and mucous membranes.
      - on the eye: Strong caustic effect.
      - Sensitization: No sensitizing effects known.
    - Additional toxicological information:
      The product shows the following dangers according to internally approved calculation methods for preparations:
      - Corrosive
      - Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.
- Carcinogenic categories
  - IARC (International Agency for Research on Cancer)
    None of the ingredients is listed.
  - NTP (National Toxicology Program)
    None of the ingredients is listed.
  - OSHA-Ca (Occupational Safety & Health Administration)
    None of the ingredients is listed.

12 Ecological information

- Toxicity
  - Aquatic toxicity:
    67-68-5 dimethyl sulfoxide
    EC50: 14,500 mg/kg (daphnia)
  - Persistence and degradability: No further relevant information available.
Product name: Reductant Solution

Behavior 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 (Self-assessment): hazardous for water
  Do not allow product to reach ground water, water course or sewage system.
  Must not reach bodies of water or drainage ditch undiluted or unneutralized.
  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 of together with household garbage. Do not allow product to reach sewage system.

- Uncleaned packagings
  Recommendation: Disposal must be made according to official regulations.

14 Transport information

Not Regulated, De minimis Quantities

- UN-Number
  DOT, IMDG, IATA: not regulated

- UN proper shipping name
  DOT, IMDG, IATA: not regulated

- Transport hazard class(es)
  DOT, IMDG, IATA: not regulated

- Packing group
  DOT, IMDG, IATA: not regulated

- Environmental hazards:
  Not applicable.

- Special precautions for user
  Warning: Miscellaneous dangerous substances and articles
  Danger code (Kemler): 90

- Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
  Not applicable.

- UN "Model Regulation"
  UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III
15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- Sara
- Section 355 (extremely hazardous substances):
  None of the ingredients is listed.
- Section 313 (Specific toxic chemical listings):
  None of the ingredients is listed.
- TSCA (Toxic Substances Control Act):
  All ingredients are listed.
- TSCA new (21st Century Act): (Substances not listed)
  25895-60-7 sodium cyanborohydride
- Proposition 65
- Chemicals known to cause cancer:
  None of the ingredients is listed.
- Chemicals known to cause reproductive toxicity for females:
  None of the ingredients is listed.
- Chemicals known to cause reproductive toxicity for males:
  None of the ingredients is listed.
- Chemicals known to cause developmental toxicity:
  None of the ingredients is listed.
- Carcinogenic categories
  - EPA (Environmental Protection Agency)
    25895-60-7 sodium cyanborohydride I (oral)
  - TLV (Threshold Limit Value established by ACGIH)
    None of the ingredients is listed.
  - NIOSH-Ca (National Institute for Occupational Safety and Health)
    None of the ingredients is listed.
- GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- Hazard pictograms
  - GHS05 GHS06 GHS07
- Signal word Danger
- Hazard-determining components of labeling:
  sodium cyanborohydride
- Hazard statements
  Fatal if swallowed or in contact with skin.
  Causes severe skin burns and eye damage.
  May cause respiratory irritation.
- Precautionary statements
  Do not allow contact with air.
  Handle under inert gas. Protect from moisture.
  Do not breathe dusts or mists.
Product name: Reductant Solution

Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. [In case of inadequate ventilation] wear respiratory protection. If swallowed: Call a doctor if you feel unwell. If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Specific treatment (see on this label). Take off immediately all contaminated clothing and wash it before reuse. Collect spillage. Store in a well-ventilated place. Keep container tightly closed. Store locked up. Dispose of contents/container in accordance with local/regional/national/international regulations. *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. 2: Acute toxicity – Category 2
- Skin Corr. 1B: Skin corrosion/irritation – Category 1B
- STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
1 Identification

- Product identifier
- Product name: 5X APTS Sample Load Buffer
- Product Code: WS0301-24, WS0301-GP
- 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
    5301 Stevens Creek Blvd
    Santa Clara, CA 95051, USA
  - Email: pdl-msds_author@agilent.com
  - Phone number: 800-227-9770
  - Emergency telephone number: CHEMTREC®: 1-800-424-9300

2 Hazard(s) identification

- Classification of the substance or mixture
  - GHS07
    Acute Tox. 4 H302 Harmful if swallowed.
    Skin Irrit. 2 H315 Causes skin irritation.
    STOT SE 3 H335 May cause respiratory irritation.
- Label elements
  - GHS label elements: The product is classified and labeled according to the Globally Harmonized System (GHS).
  - Hazard pictograms
    - GHS07
- Signal word: Warning
- Hazard statements
  Harmful if swallowed.
  Causes skin irritation.
  May cause respiratory irritation.
- Precautionary statements
  Avoid breathing dust/fume/gas/mist/vapors/spray
  Avoid release to the environment.
  Wear protective gloves/protective clothing/eye protection/face protection.
  If swallowed: Call a doctor if you feel unwell.
  If swallowed: Rinse mouth. Do NOT induce vomiting.
  If on skin: Wash with plenty of soap and water.
  IF INHALED: Call a doctor if you feel unwell.
  IF INHALED: Remove person to fresh air and keep comfortable for breathing.
  Store in accordance with local/regional/national/international regulations.
  Dispose of contents/container in accordance with local/regional/national/international regulations.

(Contd. on page 2)
Product name: 5X APTS Sample Load Buffer

Classification system:
- NFPA ratings (scale 0 - 4)
  - Health = 1
  - Fire = 0
  - Reactivity = 0
- HMIS-ratings (scale 0 - 4)
  - Health = 1
  - Fire = 0
  - Reactivity = 0

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

3 Composition/information on ingredients
- Chemical characterization: Mixtures
- Description: Mixture of the substances listed below with nonhazardous additions.
- Dangerous components: Void

4 First-aid measures
- Description of first aid measures
  - After inhalation: Supply fresh air; consult doctor in case of complaints.
  - After skin contact: Generally the product does not irritate the skin.
  - After eye contact: Rinse opened eye for several minutes under running water.
  - After swallowing: If symptoms persist consult doctor.
- Information for doctor:
  - Most important symptoms and effects, both acute and delayed: No further relevant information available.
  - Indication of any immediate medical attention and special treatment needed: No further relevant information available.

5 Fire-fighting measures
- Extinguishing media
  - Suitable extinguishing agents: Use fire fighting measures that suit the environment.
  - 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.
Product name: 5X APTS Sample Load Buffer

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.

Protective Action Criteria for Chemicals

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<th>PAC-1:</th>
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<th>mg/m³</th>
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<td>540-69-2</td>
<td>ammonium formate</td>
<td>3.7</td>
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<tr>
<td>26628-22-8</td>
<td>sodium azide</td>
<td>0.026</td>
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<table>
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<tr>
<th>PAC-2:</th>
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<th>mg/m³</th>
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<td>26628-22-8</td>
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<tr>
<td>26628-22-8</td>
<td>sodium azide</td>
<td>5.3</td>
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</table>

7 Handling and storage

Handling:
Precautions for safe handling: No special precautions are necessary if used correctly.
Information about protection against explosions and fires: 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 systems: No further data; see item 7.

Control parameters
Components with limit values that require monitoring at the workplace:
The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.
The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.
At this time, the remaining constituent has no known exposure limits.
At this time, the other constituents have no known exposure limits.
Additional information: The lists that were valid during the creation were used as basis.

Exposure controls
Personal protective equipment:
General protective and hygienic measures: Wash hands before breaks and at the end of work.
Breathing equipment: 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.
### 9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
  - **Appearance:**
    - Form: Liquid
    - Color: Colorless
    - Odor: Characteristic
    - Odor threshold: Not determined.
  - pH-value at 20 °C (68 °F): 4.4

- **Change in condition**
  - Melting point/Melting range: Undetermined.
  - Boiling point/Boiling range: Undetermined.

- **Flash point:** Not applicable.

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

- **Decomposition temperature:** Not determined.

- **Auto igniting:** Product is not selfigniting.

- **Danger of explosion:** Product does not present an explosion hazard.

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

- **Vapor pressure:** Not determined.

- **Density at 20 °C (68 °F):** >0.6606 g/cm³ (>5.51271 lbs/gal)

- **Relative density**
  - Not determined.

- **Vapor 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: 99.3 %
  - VOC content: 0.00 %

- **Solids content:**
  - <1.0 %

- **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**
  - **LD/LC50 values that are relevant for classification**:
    - 26628-22-8 sodium azide
      - Oral LD50 27 mg/kg (rat)
      - Dermal LD50 20 mg/kg (rabbit)
- **Primary irritant effect**
  - **on the skin**: May be harmful in contact with skin.
  - **on the eye**: No irritating effect.
- **Sensitization**: No sensitizing effects known.
- **Additional toxicological information**
  - **Carcinogenic categories**
    - **IARC (International Agency for Research on Cancer)**: None of the ingredients is listed.
    - **NTP (National Toxicology Program)**: None of the ingredients is listed.
    - **OSHA-Ca (Occupational Safety & Health Administration)**: None of the ingredients is listed.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity**: No further relevant information available.
- **Persistence and degradability**: No further relevant information available.
- **Behavior 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.
13 Disposal considerations

- Waste treatment methods
  - Recommendation: Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- Uncleaned packagings:
  - Recommendation: Disposal must be made according to official regulations.

14 Transport information

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

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

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

- Packing group
  - DOT, IMDG, IATA: not regulated

- Environmental hazards: Not applicable.

- Special precautions for user Not applicable.

- Transport in bulk according to Annex II of MARPOL73/78 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
  - Sara

  - Section 355 (extremely hazardous substances):
    - 26628-22-8 sodium azide

  - Section 313 (Specific toxic chemical listings):
    - 26628-22-8 sodium azide

  - TSCA (Toxic Substances Control Act):
    - All ingredients are listed.

  - Proposition 65

  - Chemicals known to cause cancer:
    - None of the ingredients is listed.

  - Chemicals known to cause reproductive toxicity for females:
    - None of the ingredients is listed.
Product name: 5X APTS Sample Load Buffer

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

- **Chemicals known to cause developmental toxicity:**
  None of the ingredients is listed.

- **Carcinogenic categories**
  - EPA (Environmental Protection Agency)
    None of the ingredients is listed.
  - TLV (Threshold Limit Value established by ACGIH)
    26628-22-8 sodium azide [A4]
  - NIOSH-Ca (National Institute for Occupational Safety and Health)
    None of the ingredients is listed.

- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**
  - GHS07

- **Signal word** Warning
- **Hazard statements**
  Harmful if swallowed.
  Causes skin irritation.
  May cause respiratory irritation.

- **Precautionary statements**
  Avoid breathing dust/fume/gas/mist/vapors/spray
  Avoid release to the environment.
  Wear protective gloves/protective clothing/eye protection/face protection.
  If swallowed: Call a doctor if you feel unwell.
  If swallowed: Rinse mouth. Do NOT induce vomiting.
  If on skin: Wash with plenty of soap and water.
  IF INHALED: Call a doctor if you feel unwell.
  IF INHALED: Remove person to fresh air and keep comfortable for breathing.
  Store in accordance with local/regional/national/international regulations.
  Dispose of contents/container in accordance with local/regional/national/international regulations.

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

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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