



# Agilent Technologies

**Kit Name:** AdvanceBio N-Glycanase (PNGase F), >2.5 U/mL

**Kit PN:** GKE-5006B, GKE-5006B-1

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

## Kit Components

| Kit Component Part Number | Kit Component Name                                   | Kit Component Part Number | Kit Component Name                        | Qty in GKE-5006B | Qty in GKE-5006B-1 |
|---------------------------|--|---------------------------|---|------------------|--------------------|
| WS0401                    | N-Glycanase Reagent Set                              | WS0010                    | 5X N-Glycanase Buffer, 1 ml               | 1 Vial           | 5 Vials            |
|                           |  | WS0012                    | Denaturation Solution, 500 µl             | 1 Vial           | 5 Vials            |
|                           |  | WS0013                    | Detergent Solution, 200 µl                | 1 Vial           | 5 Vials            |
|                           |  | WS0145                    | 5X N-Glycanase Tris Reaction Buffer, 1 ml | 1 Vial           | 5 Vials            |
| GKE-5006B                 | AdvanceBio N-Glycanase (PNGase F), ≥2.5 U/ml, 200 mU |                           | 1 Vial                                    | 5 Vials          |                    |

SDSs for each component follow this cover sheet.

## Transportation Information for the Kit:

Proper Shipping Names:

| DOT           | IATA/ICAO     | China         |
|---------------|---------------|---------------|
| Not Regulated | Not Regulated | Not Regulated |

**Safety Data Sheet  
acc. to OSHA HCS**

Revision Date: 01/25/2022

Issue Date: 01/25/2022

**1 Identification**

- **Product identifier**
- **Product name:** AdvanceBio N-Glycanase (PNGase F), >2.5 U/mL
- **Product Code:** GKE-5006A, GKE-5006B, GKE-5006D
- **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 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
- **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.

(Contd. on page 2)

US

## Safety Data Sheet acc. to OSHA HCS

Revision Date: 01/25/2022

Issue Date: 01/25/2022

**Product name:** AdvanceBio N-Glycanase (PNGase F), >2.5 U/mL

(Contd. of page 1)

· **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:**

|         |             |                       |
|---------|-------------|-----------------------|
| 77-86-1 | trometamol  | 18 mg/m <sup>3</sup>  |
| 60-00-4 | edetic acid | 4.1 mg/m <sup>3</sup> |

· **PAC-2:**

|         |             |                       |
|---------|-------------|-----------------------|
| 77-86-1 | trometamol  | 190 mg/m <sup>3</sup> |
| 60-00-4 | edetic acid | 45 mg/m <sup>3</sup>  |

· **PAC-3:**

|         |             |                         |
|---------|-------------|-------------------------|
| 77-86-1 | trometamol  | 1,200 mg/m <sup>3</sup> |
| 60-00-4 | edetic acid | 200 mg/m <sup>3</sup>   |

### 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.

US

(Contd. on page 3)

## Safety Data Sheet acc. to OSHA HCS

Revision Date: 01/25/2022

Issue Date: 01/25/2022

**Product name:** AdvanceBio N-Glycanase (PNGase F), >2.5 U/mL

(Contd. of page 2)

### 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:

|                          |                 |
|--------------------------|-----------------|
| · <b>Form:</b>           | Liquid          |
| · <b>Color:</b>          | Colorless       |
| · <b>Odor:</b>           | Characteristic  |
| · <b>Odor threshold:</b> | Not determined. |

· **pH-value at 20 °C (68 °F):** 7.5

#### · Change in condition

|                                       |                 |
|---------------------------------------|-----------------|
| · <b>Melting point/Melting range:</b> | 0 °C (32 °F)    |
| · <b>Boiling point/Boiling range:</b> | 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.

#### · Explosion limits:

|                 |                 |
|-----------------|-----------------|
| · <b>Lower:</b> | Not determined. |
| · <b>Upper:</b> | Not determined. |

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

· **Density at 20 °C (68 °F):** 1 g/cm<sup>3</sup> (8.345 lbs/gal)

· **Relative density** Not determined.

· **Vapor density** Not determined.

(Contd. on page 4)

## Safety Data Sheet acc. to OSHA HCS

Revision Date: 01/25/2022

Issue Date: 01/25/2022

**Product name:** AdvanceBio N-Glycanase (PNGase F), >2.5 U/mL

(Contd. of page 3)

|   |  |
|---|--|
| · <b>Evaporation rate</b>                         | Not determined.                            |
| · <b>Solubility in / Miscibility with Water:</b>  | Fully miscible.                            |
| · <b>Partition coefficient (n-octanol/water):</b> | Not determined.                            |
| · <b>Viscosity:</b>                               |  |
| Dynamic at 20 °C (68 °F):                         | 0.952 mPas                                 |
| Kinematic:  | Not determined.                            |
| · <b>Solvent content:</b>                         |  |
| Water:  | 99.3 %                                     |
| VOC content:                                      | 0.00 %                                     |
| Solids content:                                   | 0.3 %                                      |
| · <b>Other information</b>                        | 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)**  
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.

US

(Contd. on page 5)

## Safety Data Sheet acc. to OSHA HCS

Revision Date: 01/25/2022

Issue Date: 01/25/2022

**Product name:** AdvanceBio N-Glycanase (PNGase F), >2.5 U/mL

(Contd. of page 4)

### 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.

### 14 Transport information

|  |                 |
|--|-----------------|
| · <b>UN-Number</b>   |                 |
| · <b>DOT, ADN, IMDG, IATA</b>  | not regulated   |
| · <b>UN proper shipping name</b>   |                 |
| · <b>DOT, ADN, IMDG, IATA</b>  | not regulated   |
| · <b>Transport hazard class(es)</b>  |                 |
| · <b>DOT, ADN, IMDG, IATA</b>  |                 |
| · <b>Class</b>   | not regulated   |
| · <b>Packing group</b>   |                 |
| · <b>DOT, IMDG, IATA</b>   | not regulated   |
| · <b>Environmental hazards:</b>  | Not applicable. |
| · <b>Special precautions for user</b>  | Not applicable. |
| · <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b> | Not applicable. |
| · <b>UN "Model Regulation":</b>  | not regulated   |

(Contd. on page 6)

## Safety Data Sheet acc. to OSHA HCS

Revision Date: 01/25/2022

Issue Date: 01/25/2022

**Product name:** AdvanceBio N-Glycanase (PNGase F), >2.5 U/mL

(Contd. of page 5)

### 15 Regulatory information

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

No further relevant information available.

· **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 | ACTIVE |
| 77-86-1   | trometamol  | ACTIVE |
| 7647-14-5 | sodium chloride                                     | ACTIVE |
| 60-00-4   | edetic acid   | ACTIVE |

· **Hazardous Air Pollutants**

None of the ingredients is 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)**

None of the ingredients is listed.

· **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

· **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.

**Safety Data Sheet  
acc. to OSHA HCS**

Revision Date: 01/25/2022

Issue Date: 01/25/2022

**1 Identification**

- **Product identifier**
- **Product name:** 5x N-Glycanase Reaction Buffer
- **Product Code:** WS0010
- **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 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
- **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:**

|            |              |      |
|------------|--------------|------|
| 26628-22-8 | sodium azide | 0.1% |
|------------|--------------|------|

**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.  
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.

(Contd. on page 2)

US



## Safety Data Sheet acc. to OSHA HCS

Revision Date: 01/25/2022

Issue Date: 01/25/2022

**Product name:** 5x N-Glycanase Reaction Buffer

(Contd. of page 1)

- **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.
- **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:**

|            |              |                         |
|------------|--------------|-------------------------|
| 26628-22-8 | sodium azide | 0.026 mg/m <sup>3</sup> |
|------------|--------------|-------------------------|

- **PAC-2:**

|            |              |                        |
|------------|--------------|------------------------|
| 26628-22-8 | sodium azide | 0.29 mg/m <sup>3</sup> |
|------------|--------------|------------------------|

- **PAC-3:**

|            |              |                       |
|------------|--------------|-----------------------|
| 26628-22-8 | sodium azide | 5.3 mg/m <sup>3</sup> |
|------------|--------------|-----------------------|

### 7 Handling and storage

- **Handling:**
- **Precautions for safe handling**  
Wear protective gloves / eye protection / face protection.  
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.

(Contd. on page 3)

## Safety Data Sheet acc. to OSHA HCS

Revision Date: 01/25/2022

Issue Date: 01/25/2022

**Product name:** 5x N-Glycanase Reaction Buffer

(Contd. of page 2)

· **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:**

#### 26628-22-8 sodium azide

REL Ceiling limit value: 0.3\*\* mg/m<sup>3</sup>, 0.1\* ppm  
\*as HN<sub>3</sub>; \*\*as NaN<sub>3</sub>; Skin

TLV Ceiling limit value: 0.29\*\* mg/m<sup>3</sup>, 0.11\* ppm  
\*as HN<sub>3</sub> vapor \*\*as NaN<sub>3</sub>, A4

· **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.

· **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:**

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: Colorless

· **Odor:** Characteristic

· **Odor threshold:** Not determined.

· **pH-value at 20 °C (68 °F):** 7.5

· **Change in condition**

Melting point/Melting range: 0 °C (32 °F)

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.

(Contd. on page 4)

## Safety Data Sheet acc. to OSHA HCS

Revision Date: 01/25/2022

Issue Date: 01/25/2022

**Product name:** 5x N-Glycanase Reaction Buffer

(Contd. of page 3)

|   |   |
|---|---|
| · <b>Danger of explosion:</b>                     | Product does not present an explosion hazard. |
| · <b>Explosion limits:</b>                        |   |
| Lower:  | Not determined.                               |
| Upper:  | Not determined.                               |
| · <b>Vapor pressure at 20 °C (68 °F):</b>         | 23 hPa (17.3 mm Hg)                           |
| · <b>Density at 20 °C (68 °F):</b>                | 1 g/cm <sup>3</sup> (8.345 lbs/gal)           |
| · <b>Relative density</b>                         | Not determined.                               |
| · <b>Vapor density</b>                            | Not determined.                               |
| · <b>Evaporation rate</b>                         | Not determined.                               |
| · <b>Solubility in / Miscibility with</b>         |   |
| Water:  | Fully miscible.                               |
| · <b>Partition coefficient (n-octanol/water):</b> | Not determined.                               |
| · <b>Viscosity:</b>                               |   |
| Dynamic at 20 °C (68 °F):                         | 0.952 mPas                                    |
| Kinematic:  | Not determined.                               |
| · <b>Solvent content:</b>                         |   |
| Water:  | 98.5 %  |
| VOC content:                                      | 0.00 %  |
| Solids content:                                   | 0.2 %   |
| · <b>Other information</b>                        | 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.

(Contd. on page 5)

US

## Safety Data Sheet acc. to OSHA HCS

Revision Date: 01/25/2022

Issue Date: 01/25/2022

**Product name:** 5x N-Glycanase Reaction Buffer

(Contd. of page 4)

· **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

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.

Harmful

· **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.

· **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.

### 14 Transport information

· **UN-Number**

· **DOT, ADN, IMDG, IATA** not regulated

· **UN proper shipping name**

· **DOT, ADN, IMDG, IATA** not regulated

(Contd. on page 6)

## Safety Data Sheet acc. to OSHA HCS

Revision Date: 01/25/2022

Issue Date: 01/25/2022

**Product name:** 5x N-Glycanase Reaction Buffer

(Contd. of page 5)

|  |                 |
|--|-----------------|
| · <b>Transport hazard class(es)</b>  |                 |
| · <b>DOT, ADN, IMDG, IATA</b>  |                 |
| · <b>Class</b>   | not regulated   |
| · <b>Packing group</b>   |                 |
| · <b>DOT, IMDG, IATA</b>   | not regulated   |
| · <b>Environmental hazards:</b>  | Not applicable. |
| · <b>Special precautions for user</b>  | Not applicable. |
| · <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b> | Not applicable. |
| · <b>UN "Model Regulation":</b>  | not regulated   |

### 15 Regulatory information

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

No further relevant information available.

· **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 components have the value ACTIVE.

· **Hazardous Air Pollutants**

None of the ingredients is 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)**

26628-22-8 | sodium azide

A4

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **GHS label elements** Void

· **Hazard pictograms** Void

(Contd. on page 7)

**Safety Data Sheet  
acc. to OSHA HCS**

Revision Date: 01/25/2022

Issue Date: 01/25/2022

**Product name:** 5x N-Glycanase Reaction Buffer

(Contd. of page 6)

- **Signal word** Void
- **Hazard statements** Void
- **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.

US

**Safety Data Sheet  
acc. to OSHA HCS**

Revision Date: 01/25/2022

Issue Date: 01/25/2022

**1 Identification**

- **Product identifier**
- **Product name:** Denaturation Solution
- **Product Code:** WS0012
- **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**



GHS05 Corrosion

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

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Acute Tox. 4 H312 Harmful in contact with skin.

Flam. Liq. 4 H227 Combustible liquid.

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



GHS05



GHS07

- **Signal word** Danger
- **Hazard-determining components of labeling:**  
2-mercaptoethanol  
sodium dodecyl sulphate
- **Hazard statements**  
Combustible liquid.  
Harmful in contact with skin.  
Causes severe skin burns and eye damage.

(Contd. on page 2)

## Safety Data Sheet acc. to OSHA HCS

Revision Date: 01/25/2022

Issue Date: 01/25/2022

**Product name:** Denaturation Solution

(Contd. of page 1)

- **Precautionary statements**

Keep away from flames and hot surfaces. – No smoking.

Do not breathe dusts or mists.

Wash thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection.

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.

Wash contaminated clothing before reuse.

In case of fire: Use CO<sub>2</sub>, powder or water spray to extinguish.

Store in a well-ventilated place. Keep cool.

Store locked up.

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

- **Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

### 3 Composition/information on ingredients

- **Chemical characterization: Mixtures**

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

- **Dangerous components:**

|          |                         |      |
|----------|-------------------------|------|
| 60-24-2  | 2-mercaptoethanol       | 7.0% |
| 151-21-3 | sodium dodecyl sulphate | 2.0% |

### 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:** 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:**

CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

(Contd. on page 3)



## Safety Data Sheet acc. to OSHA HCS

Revision Date: 01/25/2022

Issue Date: 01/25/2022

**Product name:** Denaturation Solution

(Contd. of page 2)

- **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 product to reach sewage system or any water course.  
Inform respective authorities in case of seepage into water course or sewage system.  
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).  
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:**

|          |                         |                       |
|----------|-------------------------|-----------------------|
| 60-24-2  | 2-mercaptoethanol       | 0.6 ppm               |
| 151-21-3 | sodium dodecyl sulphate | 3.9 mg/m <sup>3</sup> |

· **PAC-2:**

|          |                         |                      |
|----------|-------------------------|----------------------|
| 60-24-2  | 2-mercaptoethanol       | 3.5 ppm              |
| 151-21-3 | sodium dodecyl sulphate | 43 mg/m <sup>3</sup> |

· **PAC-3:**

|          |                         |                       |
|----------|-------------------------|-----------------------|
| 60-24-2  | 2-mercaptoethanol       | 29 ppm                |
| 151-21-3 | sodium dodecyl sulphate | 260 mg/m <sup>3</sup> |

### 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.

US

(Contd. on page 4)

## Safety Data Sheet acc. to OSHA HCS

Revision Date: 01/25/2022

Issue Date: 01/25/2022

**Product name:** Denaturation Solution

(Contd. of page 3)

### 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. At this time, the remaining constituent has no known exposure limits.

#### 60-24-2 2-mercaptoethanol

|      |                                  |
|------|----------------------------------|
| WEEL | Long-term value: 0.2 ppm<br>Skin |
|------|----------------------------------|

· **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: Clear

· **Odor:** Unpleasant

· **Odor threshold:** Not determined.

· **pH-value:** Not determined.

(Contd. on page 5)

## Safety Data Sheet acc. to OSHA HCS

Revision Date: 01/25/2022

Issue Date: 01/25/2022

**Product name:** Denaturation Solution

(Contd. of page 4)

|  |  |
|--|--|
| · <b>Change in condition</b><br>Melting point/Melting range: | Undetermined.                              |
| Boiling point/Boiling range:                                 | 100 °C (212 °F)                            |
| · <b>Flash point:</b>  | 68 °C (154.4 °F)                           |
| · <b>Flammability (solid, gaseous):</b>                      | Not applicable.                            |
| · <b>Decomposition temperature:</b>                          | Not determined.                            |
| · <b>Auto igniting:</b>                                      | Product is not selfigniting.               |
| · <b>Danger of explosion:</b>                                | Not determined.                            |
| · <b>Explosion limits:</b><br>Lower:                         | Not determined.                            |
| Upper:   | Not determined.                            |
| · <b>Vapor pressure at 20 °C (68 °F):</b>                    | 23 hPa (17.3 mm Hg)                        |
| · <b>Density at 20 °C (68 °F):</b>                           | 1.0014 g/cm <sup>3</sup> (8.35668 lbs/gal) |
| · <b>Relative density</b>                                    | Not determined.                            |
| · <b>Vapor density</b>                                       | Not determined.                            |
| · <b>Evaporation rate</b>                                    | Not determined.                            |
| · <b>Solubility in / Miscibility with</b><br>Water:          | Fully miscible.                            |
| · <b>Partition coefficient (n-octanol/water):</b>            | Not determined.                            |
| · <b>Viscosity:</b><br>Dynamic:                              | Not determined.                            |
| Kinematic:   | Not determined.                            |
| · <b>Solvent content:</b><br>Water:                          | 91.0 %                                     |
| VOC content:   | 0.00 %                                     |
| Solids content:  | 0.0 %                                      |
| · <b>Other information</b>                                   | 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.

US

(Contd. on page 6)

## Safety Data Sheet acc. to OSHA HCS

Revision Date: 01/25/2022

Issue Date: 01/25/2022

**Product name:** Denaturation Solution

(Contd. of page 5)

### 11 Toxicological information

- **Information on toxicological effects**

- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

**60-24-2 2-mercaptoethanol**

|            |          |                        |
|------------|----------|------------------------|
| Oral       | LD50     | 190 mg/kg (mouse)      |
| Dermal     | LD50     | 112-224 mg/kg (rabbit) |
| Inhalative | LC50/4 h | 2.05 mg/l (rat)        |

- **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:

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:**

**60-24-2 2-mercaptoethanol**

|             |   |
|-------------|---|
| EC50 48 Hr  | 0.0004 g/L (daphnia magna)                      |
| ErC50 72 Hr | 19 mg/l (Desmodesmus subspicatus (green algae)) |

- **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.

- **Ecotoxicological effects:**

- **Remark:** Harmful to fish

- **Additional ecological information:**

- **General notes:**

Water hazard class 3 (Self-assessment): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Danger to drinking water if even extremely small quantities leak into the ground.

Harmful to aquatic organisms

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

(Contd. on page 7)

## Safety Data Sheet acc. to OSHA HCS

Revision Date: 01/25/2022

Issue Date: 01/25/2022

**Product name:** Denaturation Solution

(Contd. of page 6)

· **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

- |  |                 |
|--|-----------------|
| · <b>UN-Number</b>   |                 |
| · <b>DOT, ADN, IMDG, IATA</b>  | not regulated   |
| · <b>UN proper shipping name</b>   |                 |
| · <b>DOT, ADN, IMDG, IATA</b>  | not regulated   |
| · <b>Transport hazard class(es)</b>  |                 |
| · <b>DOT, ADN, IMDG, IATA</b>  |                 |
| · <b>Class</b>   | not regulated   |
| · <b>Packing group</b>   |                 |
| · <b>DOT, IMDG, IATA</b>   | not regulated   |
| · <b>Environmental hazards:</b>  | Not applicable. |
| · <b>Special precautions for user</b>  | Not applicable. |
| · <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b> | Not applicable. |
| · <b>UN "Model Regulation":</b>  | not regulated   |

### 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**  
No further relevant information available.
- **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 components have the value ACTIVE.

· **Hazardous Air Pollutants**

None of the ingredients is listed.

(Contd. on page 8)

## Safety Data Sheet acc. to OSHA HCS

Revision Date: 01/25/2022

Issue Date: 01/25/2022

**Product name:** Denaturation Solution

(Contd. of page 7)

- **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)**

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    GHS07

- **Signal word** Danger

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

2-mercaptoethanol  
sodium dodecyl sulphate

- **Hazard statements**

Combustible liquid.  
Harmful in contact with skin.  
Causes severe skin burns and eye damage.

- **Precautionary statements**

Keep away from flames and hot surfaces. – No smoking.  
Do not breathe dusts or mists.  
Wash thoroughly after handling.  
Wear protective gloves/protective clothing/eye protection/face protection.  
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.  
Wash contaminated clothing before reuse.  
In case of fire: Use CO<sub>2</sub>, powder or water spray to extinguish.  
Store in a well-ventilated place. Keep cool.  
Store locked up.  
Dispose of contents/container in accordance with local/regional/national/international regulations.

(Contd. on page 9)

**Safety Data Sheet  
acc. to OSHA HCS**

Revision Date: 01/25/2022

Issue Date: 01/25/2022

**Product name:** Denaturation Solution

(Contd. of page 8)

**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:**

Flam. Liq. 4: Flammable liquids – Category 4

Acute Tox. 4: Acute toxicity – Category 4

Skin Corr. 1B: Skin corrosion/irritation – Category 1B

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

US

**Safety Data Sheet  
acc. to OSHA HCS**

Revision Date: 01/25/2022

Issue Date: 01/25/2022

**1 Identification**

- **Product identifier**
- **Product name:** Detergent Solution
- **Product Code:** WS0013
- **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 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
- **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.

(Contd. on page 2)

US



## Safety Data Sheet acc. to OSHA HCS

Revision Date: 01/25/2022

Issue Date: 01/25/2022

**Product name:** Detergent Solution

(Contd. of page 1)

· **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).
- **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:**

|           |                       |                      |
|-----------|-----------------------|----------------------|
| 9016-45-9 | nonylphenoethoxylates | 43 mg/m <sup>3</sup> |
|-----------|-----------------------|----------------------|

· **PAC-2:**

|           |                       |                       |
|-----------|-----------------------|-----------------------|
| 9016-45-9 | nonylphenoethoxylates | 470 mg/m <sup>3</sup> |
|-----------|-----------------------|-----------------------|

· **PAC-3:**

|           |                       |                         |
|-----------|-----------------------|-------------------------|
| 9016-45-9 | nonylphenoethoxylates | 5,400 mg/m <sup>3</sup> |
|-----------|-----------------------|-------------------------|

### 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.

US

(Contd. on page 3)

## Safety Data Sheet acc. to OSHA HCS

Revision Date: 01/25/2022

Issue Date: 01/25/2022

**Product name:** Detergent Solution

(Contd. of page 2)

### 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:

|                          |                 |
|--------------------------|-----------------|
| · <b>Form:</b>           | Liquid          |
| · <b>Color:</b>          | Colorless       |
| · <b>Odor:</b>           | Characteristic  |
| · <b>Odor threshold:</b> | Not determined. |

· **pH-value:** Not determined.

#### · Change in condition

|                                       |                 |
|---------------------------------------|-----------------|
| · <b>Melting point/Melting range:</b> | Undetermined.   |
| · <b>Boiling point/Boiling range:</b> | 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.

#### · Explosion limits:

|                 |                 |
|-----------------|-----------------|
| · <b>Lower:</b> | Not determined. |
| · <b>Upper:</b> | Not determined. |

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

· **Density at 20 °C (68 °F):** 1.009 g/cm<sup>3</sup> (8.42011 lbs/gal)

· **Relative density** Not determined.

· **Vapor density** Not determined.

(Contd. on page 4)

## Safety Data Sheet acc. to OSHA HCS

Revision Date: 01/25/2022

Issue Date: 01/25/2022

**Product name:** Detergent Solution

(Contd. of page 3)

|   |  |
|---|--|
| · <b>Evaporation rate</b>                         | Not determined.                            |
| · <b>Solubility in / Miscibility with Water:</b>  | Fully miscible.                            |
| · <b>Partition coefficient (n-octanol/water):</b> | Not determined.                            |
| · <b>Viscosity:</b>                               |  |
| Dynamic:  | Not determined.                            |
| Kinematic:  | Not determined.                            |
| · <b>Solvent content:</b>                         |  |
| Water:  | 85.0 %                                     |
| VOC content:                                      | 0.00 %                                     |
| Solids content:                                   | 15.0 %                                     |
| · <b>Other information</b>                        | 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)**  
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.

US  
(Contd. on page 5)

## Safety Data Sheet acc. to OSHA HCS

Revision Date: 01/25/2022

Issue Date: 01/25/2022

**Product name:** Detergent Solution

(Contd. of page 4)

### 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 2 (Self-assessment): hazardous for water  
Do not allow product to reach ground water, water course or sewage system.  
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:** 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.

### 14 Transport information

Not Regulated, De minimis Quantities

- |  |                 |
|--|-----------------|
| · <b>UN-Number</b>   |                 |
| · <b>DOT, ADN, IMDG, IATA</b>  | not regulated   |
| · <b>UN proper shipping name</b>   |                 |
| · <b>DOT, ADN, IMDG, IATA</b>  | not regulated   |
| · <b>Transport hazard class(es)</b>  |                 |
| · <b>DOT, ADN, IMDG, IATA</b>  |                 |
| · <b>Class</b>   | not regulated   |
| · <b>Packing group</b>   |                 |
| · <b>DOT, IMDG, IATA</b>   | not regulated   |
| · <b>Environmental hazards:</b>  | Not applicable. |
| · <b>Special precautions for user</b>  | Not applicable. |
| · <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b> | Not applicable. |

(Contd. on page 6)

US

## Safety Data Sheet acc. to OSHA HCS

Revision Date: 01/25/2022

Issue Date: 01/25/2022

**Product name:** Detergent Solution

(Contd. of page 5)

· **UN "Model Regulation":** not regulated

### 15 Regulatory information

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

No further relevant information available.

· **Sara**

· **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**

9016-45-9 | nonylphenoethoxylates

· **TSCA (Toxic Substances Control Act):**

All components have the value ACTIVE.

· **Hazardous Air Pollutants**

None of the ingredients is 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)**

None of the ingredients is listed.

· **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

· **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.

**Safety Data Sheet  
acc. to OSHA HCS**

Revision Date: 01/25/2022

Issue Date: 01/25/2022

**1 Identification**

- **Product identifier**
- **Product name:** 5X N-Glycanase Tris Reaction Buffer
- **Product Code:** WS0145
- **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 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
- **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.

(Contd. on page 2)

US

## Safety Data Sheet acc. to OSHA HCS

Revision Date: 01/25/2022

Issue Date: 01/25/2022

**Product name:** 5X N-Glycanase Tris Reaction Buffer

(Contd. of page 1)

· **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:**

|           |  |                      |
|-----------|--|----------------------|
| 1185-53-1 | 2-amino-2-(hydroxymethyl)propane-1,3-diolhydrochloride | 12 mg/m <sup>3</sup> |
|-----------|--|----------------------|

· **PAC-2:**

|           |  |                       |
|-----------|--|-----------------------|
| 1185-53-1 | 2-amino-2-(hydroxymethyl)propane-1,3-diolhydrochloride | 130 mg/m <sup>3</sup> |
|-----------|--|-----------------------|

· **PAC-3:**

|           |  |                       |
|-----------|--|-----------------------|
| 1185-53-1 | 2-amino-2-(hydroxymethyl)propane-1,3-diolhydrochloride | 790 mg/m <sup>3</sup> |
|-----------|--|-----------------------|

### 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.

(Contd. on page 3)

## Safety Data Sheet acc. to OSHA HCS

Revision Date: 01/25/2022

Issue Date: 01/25/2022

**Product name:** 5X N-Glycanase Tris Reaction Buffer

(Contd. of page 2)

- **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          |
| Color:          | Clear           |
| Odor:           | Odorless        |
| Odor threshold: | Not determined. |

· **pH-value at 20 °C (68 °F):** 8

##### · Change in condition

|                              |                 |
|------------------------------|-----------------|
| Melting point/Melting range: | 0 °C (32 °F)    |
| 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.

##### · 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):** 1.0028 g/cm<sup>3</sup> (8.36837 lbs/gal)

· **Relative density** Not determined.

· **Vapor density** Not determined.

· **Evaporation rate** Not determined.

##### · Solubility in / Miscibility with

Water: Fully miscible.

(Contd. on page 4)



## Safety Data Sheet acc. to OSHA HCS

Revision Date: 01/25/2022

Issue Date: 01/25/2022

**Product name:** 5X N-Glycanase Tris Reaction Buffer

(Contd. of page 3)

|   |  |  |
|---|--|--|
| · <b>Partition coefficient (n-octanol/water):</b> | Not determined.                            |  |
| · <b>Viscosity:</b>                               |  |  |
| Dynamic at 20 °C (68 °F):                         | 0.952 mPas                                 |  |
| Kinematic:  | Not determined.                            |  |
| · <b>Solvent content:</b>                         |  |  |
| Water:  | 99.0 %                                     |  |
| VOC content:                                      | 0.00 %                                     |  |
| Solids content:                                   | 1.0 %                                      |  |
| · <b>Other information</b>                        | 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)**

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.

(Contd. on page 5)

## Safety Data Sheet acc. to OSHA HCS

Revision Date: 01/25/2022

Issue Date: 01/25/2022

**Product name:** 5X N-Glycanase Tris Reaction Buffer

(Contd. of page 4)

- **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.

### 14 Transport information

- |  |                 |
|--|-----------------|
| · <b>UN-Number</b>   |                 |
| · <b>DOT, ADN, IMDG, IATA</b>  | not regulated   |
| · <b>UN proper shipping name</b>   |                 |
| · <b>DOT, ADN, IMDG, IATA</b>  | not regulated   |
| · <b>Transport hazard class(es)</b>  |                 |
| · <b>DOT, ADN, IMDG, IATA</b>  |                 |
| · <b>Class</b>   | not regulated   |
| · <b>Packing group</b>   |                 |
| · <b>DOT, IMDG, IATA</b>   | not regulated   |
| · <b>Environmental hazards:</b>  | Not applicable. |
| · <b>Special precautions for user</b>  | Not applicable. |
| · <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b> | Not applicable. |
| · <b>UN "Model Regulation":</b>  | not regulated   |

### 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**  
No further relevant information available.

(Contd. on page 6)

## Safety Data Sheet acc. to OSHA HCS

Revision Date: 01/25/2022

Issue Date: 01/25/2022

**Product name:** 5X N-Glycanase Tris Reaction Buffer

(Contd. of page 5)

· **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 components have the value ACTIVE.

· **Hazardous Air Pollutants**

None of the ingredients is 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)**

None of the ingredients is listed.

· **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

· **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.