

# **RiboPrinter® System MP Base**

# KIT2034

Date of compilation: 2022-04-26

## **Bill of materials**

| Name of substance                                | Identifier               | Classification acc.<br>to GHS               | Pictograms | Page    |
|--|--------------------------|---|------------|---------|
| RiboPrinter™ MP Base Pack<br>Assay Buffer        | Internal code<br>SLN2000 |   |            | 2 - 14  |
| RiboPrinter™ MP Base Pack<br>Bis/Tris Buffer     | Internal code<br>SLN2001 |   |            | 15 - 25 |
| RiboPrinter™ MP Base Pack<br>Denaturant          | Internal code<br>SLN2002 | Skin Irrit. 2 / H315<br>Eye Irrit. 2 / H319 | (!)        | 26 - 37 |
| RiboPrinter™ MP Base Pack<br>Post Conjugate Wash | Internal code<br>SLN2013 |   |            | 38 - 48 |
| RiboPrinter™ MP Base Post<br>Hybridization Wash  | Internal code<br>SLN2014 |   |            | 49 - 60 |



acc. to 29 CFR 1910.1200 App D

## **RiboPrinter™ MP Base Pack Assay Buffer**

Version number: 1.1

Date of compilation: 2022-04-26

#### **SECTION 1: Identification Product identifier** 1.1 Trade name **RiboPrinter™ MP Base Pack Assay Buffer** Product code(s) SLN2000 Relevant identified uses of the substance or mixture and uses advised against 1.2 Relevant identified uses Laboratory and analytical use 1.3 Details of the supplier of the safety data sheet **Qualicon Diagnostics LLC** 941 Avenida Acaso Camarillo CA 93012 **United States** Telephone: 1-302-695-5300 Telefax: 1-302-351-6454 e-mail: diagnostics.support@hygiena.com Website: https://www.hygiena.com e-mail (competent person) diagnostics.support@hygiena.com **Emergency telephone number** 1.4 **Emergency information service**

1-302-695-5300 This number is only available during the following office hours: Mon-Fri 08:00 AM - 05:00 PM

## SECTION 2: Hazard(s) identification

### 2.1 Classification of the substance or mixture

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200) This mixture does not meet the criteria for classification.

## 2.2 Label elements

Labelling acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200) not required

#### 2.3 Other hazards

of no significance

## **SECTION 3: Composition/information on ingredients**

## 3.1 Substances

Not relevant (mixture)

## 3.2 Mixtures



acc. to 29 CFR 1910.1200 App D

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#### Description of the mixture

| Name of substance                   | Identifier                         | Wt%       | Classification acc. to GHS  | Pictograms |
|-------------------------------------|------------------------------------|-----------|---|------------|
| Pyrogen Free Water                  | CAS No<br>7732-18-5                | ≥ 90      |   |            |
| Sodium Carbonate, Anhyd-<br>rous    | CAS No<br>497-19-8                 | 0.1 - < 1 | Eye Irrit. 2 / H319   | (!)        |
| Water, distilled                    | CAS No<br>7732-18-5                | < 0.1     |   |            |
| Magnesium Acetate Tetrahy-<br>drate | CAS No<br>16674-78-5               | < 0.1     |   |            |
| Magnesium nitrate                   | CAS No<br>10377-60-3<br>13446-18-9 | < 0.1     |   |            |
| Magnesium Chloride (Anhyd-<br>rous) | CAS No<br>7786-30-3                | < 0.1     |   |            |
| 2-Methyl-4-isothiazolin-3-one       | CAS No<br>2682-20-4                | < 0.1     | Acute Tox. 3 / H301<br>Acute Tox. 3 / H311<br>Acute Tox. 2 / H330 |            |

For full text of abbreviations: see SECTION 16.

## SECTION 4: First-aid measures

#### 4.1 Description of first-aid measures

#### General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

#### Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. Provide fresh air.

#### Following skin contact

Wash with plenty of soap and water.

#### Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

#### Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

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

Symptoms and effects are not known to date.

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

none



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## **SECTION 5: Fire-fighting measures**

#### 5.1 Extinguishing media

Suitable extinguishing media

Water spray, BC-powder, Carbon dioxide (CO2)

Unsuitable extinguishing media

Water jet

### 5.2 Special hazards arising from the substance or mixture

Hazardous combustion products

Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO2)

### 5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Coordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

### **SECTION 6: Accidental release measures**

#### 6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety.

#### For emergency responders

Wear breathing apparatus if exposed to vapors/dust/aerosols/gases.

#### 6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

#### 6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains

#### Advice on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

#### Appropriate containment techniques

Use of adsorbent materials.

#### Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

#### 6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.



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## SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

#### Recommendations

- Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Use only in well-ventilated areas.

#### Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

### 7.2 Conditions for safe storage, including any incompatibilities

#### Control of the effects

Protect against external exposure, such as

frost

#### 7.3 Specific end use(s)

See section 16 for a general overview.

### **SECTION 8: Exposure controls/personal protection**

#### 8.1 Control parameters

This information is not available.

| Relevant DNELs of components of the mixture |           |          |                         |                                       |                   |                         |
|---|-----------|----------|-------------------------|---------------------------------------|-------------------|-------------------------|
| Name of substance                           | CAS No    | Endpoint | Threshold<br>level      | Protection goal,<br>route of exposure | Used in           | Exposure time           |
| 2-Methyl-4-iso-<br>thiazolin-3-one          | 2682-20-4 | DNEL     | 0.021 mg/m <sup>3</sup> | human, inhalatory                     | worker (industry) | chronic - local effects |
| 2-Methyl-4-iso-<br>thiazolin-3-one          | 2682-20-4 | DNEL     | 0.043 mg/m <sup>3</sup> | human, inhalatory                     | worker (industry) | acute - local effects   |

| Relevant PNECs of components of the mixture |                          |          |                                     |                   |                                 |                                   |
|---|--------------------------|----------|-------------------------------------|-------------------|---------------------------------|-----------------------------------|
| Name of substance                           | CAS No                   | Endpoint | Threshold<br>level                  | Organism          | Environmental com-<br>partment  | Exposure time                     |
| Magnesium nitrate                           | 10377-60-3<br>13446-18-9 | PNEC     | 18 <sup>mg</sup> /l                 | aquatic organisms | sewage treatment<br>plant (STP) | short-term (single in-<br>stance) |
| Magnesium Chloride<br>(Anhydrous)           | 7786-30-3                | PNEC     | 3.21 <sup>mg</sup> / <sub>l</sub>   | aquatic organisms | freshwater                      | short-term (single in-<br>stance) |
| Magnesium Chloride<br>(Anhydrous)           | 7786-30-3                | PNEC     | 0.32 <sup>mg</sup> / <sub>l</sub>   | aquatic organisms | marine water                    | short-term (single in-<br>stance) |
| Magnesium Chloride<br>(Anhydrous)           | 7786-30-3                | PNEC     | 90 <sup>mg</sup> / <sub>l</sub>     | aquatic organisms | sewage treatment<br>plant (STP) | short-term (single in-<br>stance) |
| Magnesium Chloride<br>(Anhydrous)           | 7786-30-3                | PNEC     | 288.9 <sup>mg</sup> / <sub>kg</sub> | aquatic organisms | freshwater sediment             | short-term (single in-<br>stance) |



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| Relevant PNECs of components of the mixture |           |          |                                     |                            |                                 |                                   |
|---|-----------|----------|-------------------------------------|----------------------------|---------------------------------|-----------------------------------|
| Name of substance                           | CAS No    | Endpoint | Threshold<br>level                  | Organism                   | Environmental com-<br>partment  | Exposure time                     |
| Magnesium Chloride<br>(Anhydrous)           | 7786-30-3 | PNEC     | 28.89 <sup>mg</sup> / <sub>kg</sub> | aquatic organisms          | marine sediment                 | short-term (single in-<br>stance) |
| Magnesium Chloride<br>(Anhydrous)           | 7786-30-3 | PNEC     | 662.8 <sup>mg</sup> / <sub>kg</sub> | terrestrial organ-<br>isms | soil                            | short-term (single in-<br>stance) |
| 2-Methyl-4-iso-<br>thiazolin-3-one          | 2682-20-4 | PNEC     | 3.39 <sup>µg</sup> / <sub>I</sub>   | aquatic organisms          | freshwater                      | short-term (single in-<br>stance) |
| 2-Methyl-4-iso-<br>thiazolin-3-one          | 2682-20-4 | PNEC     | 3.39 <sup>µg</sup> / <sub>I</sub>   | aquatic organisms          | marine water                    | short-term (single in-<br>stance) |
| 2-Methyl-4-iso-<br>thiazolin-3-one          | 2682-20-4 | PNEC     | 0.23 <sup>mg</sup> / <sub>l</sub>   | aquatic organisms          | sewage treatment<br>plant (STP) | short-term (single in-<br>stance) |
| 2-Methyl-4-iso-<br>thiazolin-3-one          | 2682-20-4 | PNEC     | 0.047 <sup>mg</sup> / <sub>kg</sub> | terrestrial organ-<br>isms | soil                            | short-term (single in-<br>stance) |

### 8.2 Exposure controls

### Appropriate engineering controls

General ventilation.

#### Individual protection measures (personal protective equipment)

#### Eye/face protection

Wear eye/face protection.

#### Skin protection

#### - Hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

#### - Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

#### **Respiratory protection**

In case of inadequate ventilation wear respiratory protection.

#### Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.



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## **SECTION 9: Physical and chemical properties**

## 9.1 Information on basic physical and chemical properties

## Appearance

| Physical state | liquid                |
|----------------|-----------------------|
| Color          | not determined        |
| Particle       | not relevant (liquid) |
| Odor           | characteristic        |

## Other safety parameters

| pH (value)                              | not determined                                |  |
|---|---|--|
| Melting point/freezing point            | not determined                                |  |
| Initial boiling point and boiling range | not determined                                |  |
| Flash point                             | not determined                                |  |
| Evaporation rate                        | Not determined                                |  |
| Flammability (solid, gas)               | not relevant, (fluid)                         |  |
| Vapor pressure                          | not determined                                |  |
| Density                                 | not determined                                |  |
| Vapor density                           | this information is not available             |  |
| Relative density                        | Information on this property is not available |  |
| Solubility(ies)                         | not determined                                |  |
| Partition coefficient                   |   |  |
| - n-octanol/water (log KOW)             | this information is not available             |  |
| Auto-ignition temperature               | not determined                                |  |
| Viscosity                               | not determined                                |  |
| Explosive properties                    | none  |  |

none

Oxidizing properties



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#### 9.2 Other information

| Solvent content | 99.53 %  |
|-----------------|----------|
| Solid content   | 0.4672 % |

## **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

#### 10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

#### 10.3 Possibility of hazardous reactions

No known hazardous reactions.

#### 10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

#### 10.5 Incompatible materials

Oxidizers

#### 10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

### **SECTION 11: Toxicological information**

#### 11.1 Information on toxicological effects

Test data are not available for the complete mixture.

#### Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

#### Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

This mixture does not meet the criteria for classification.

#### Acute toxicity

Shall not be classified as acutely toxic.

| Acute toxicity estimate (ATE) of components of the mixture |           |                       |                                       |  |
|--|-----------|-----------------------|---------------------------------------|--|
| Name of substance  | CAS No    | Exposure route        | ATE                                   |  |
| 2-Methyl-4-isothiazolin-3-one                              | 2682-20-4 | oral                  | 120 <sup>mg</sup> / <sub>kg</sub>     |  |
| 2-Methyl-4-isothiazolin-3-one                              | 2682-20-4 | dermal                | 242 <sup>mg</sup> / <sub>kg</sub>     |  |
| 2-Methyl-4-isothiazolin-3-one                              | 2682-20-4 | inhalation: dust/mist | 0.11 <sup>mg</sup> / <sub>l</sub> /4h |  |

#### Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.



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Serious eye damage/eye irritation Shall not be classified as seriously damaging to the eye or eye irritant.

### Respiratory or skin sensitization

Shall not be classified as a respiratory or skin sensitizer.

#### Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

### Carcinogenicity

Shall not be classified as carcinogenic.

### Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

### Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

### Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

### **SECTION 12: Ecological information**

#### 12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

### 12.2 Persistence and degradability

Data are not available.

#### 12.3 Bioaccumulative potential

Data are not available.

## 12.4 Mobility in soil

Data are not available.

## 12.5 Results of PBT and vPvB assessment

Data are not available.

## 12.6 Endocrine disrupting properties

None of the ingredients are listed.

## 12.7 Other adverse effects

Data are not available.



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### **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

#### Waste treatment of containers/packages

Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

#### Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

| SECTION 14: Transport information |           |                                      |  |  |  |
|-----------------------------------|-----------|--------------------------------------|--|--|--|
| 14.1                              | UN number | not subject to transport regulations |  |  |  |
|                                   |           |                                      |  |  |  |

- 14.2 UN proper shipping name
- 14.3 Transport hazard class(es)
- 14.4 Packing group
- 14.5 Environmental hazards

- not relevant
- not assigned
- not assigned

non-environmentally hazardous acc. to the dangerous goods regulations

### 14.6 Special precautions for user

There is no additional information.

**14.7** Transport in bulk according to IMO instruments

The cargo is not intended to be carried in bulk.

### Information for each of the UN Model Regulations

## **Transport of dangerous goods by road or rail (49 CFR US DOT) - Additional information** Not subject to transport regulations.

### International Maritime Dangerous Goods Code (IMDG) - Additional information Not subject to IMDG.

## **International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information** Not subject to ICAO-IATA.

## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations specific for the product in question

### National regulations (United States)

### Superfund Amendment and Reauthorization Act (SARA TITLE III )

- The List of Extremely Hazardous Substances and Their Threshold Planning Quantities (EPCRA Section 302, 304)

none of the ingredients are listed



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- Specific Toxic Chemical Listings (EPCRA Section 313) none of the ingredients are listed

### Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

- List of Hazardous Substances and Reportable Quantities (CERCLA section 102a) (40 CFR 302.4) none of the ingredients are listed

### **Clean Air Act**

none of the ingredients are listed

### **Right to Know Hazardous Substance List**

#### - Hazardous Substance List (NJ-RTK)

| Name of substance | CAS No     | Remarks | Classifications |
|-------------------|------------|---------|-----------------|
| Magnesium nitrate | 10377-60-3 |         |                 |

# California Environmental Protection Agency (Cal/EPA): Proposition 65 - Safe Drinking Water and Toxic Enforcement Act of 1987

none of the ingredients are listed

### Industry or sector specific available guidance(s)

#### NPCA-HMIS® III

Hazardous Materials Identification System. American Coatings Association.

| Category            | Rating | Description  |
|---------------------|--------|--|
| Chronic             | /      | none   |
| Health              | 0      | no significant risk to health  |
| Flammability        | 1      | material that must be preheated before ignition can occur  |
| Physical hazard     | 0      | material that is normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosive |
| Personal protection | -      |  |

#### **NFPA® 704**

National Fire Protection Association: Standard System for the Identification of the Hazards of Materials for Emergency Response (United States).

| Category       | Degree of<br>hazard | Description  |
|----------------|---------------------|--|
| Flammability   | 1                   | material that must be preheated before ignition can occur  |
| Health         | 0                   | material that, under emergency conditions, would offer no hazard beyond that of ordin-<br>ary combustible material |
| Instability    | 0                   | material that is normally stable, even under fire conditions   |
| Special hazard |                     |  |



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### National inventories

| Country | Inventory  | Status                         |
|---------|------------|--------------------------------|
| AU      | AIIC       | all ingredients are listed     |
| CA      | DSL        | not all ingredients are listed |
| CN      | IECSC      | all ingredients are listed     |
| EU      | ECSI       | not all ingredients are listed |
| EU      | REACH Reg. | not all ingredients are listed |
| JP      | CSCL-ENCS  | not all ingredients are listed |
| JP      | ISHA-ENCS  | not all ingredients are listed |
| KR      | KECI       | not all ingredients are listed |
| MX      | INSQ       | not all ingredients are listed |
| NZ      | NZIoC      | all ingredients are listed     |
| PH      | PICCS      | all ingredients are listed     |
| TR      | CICR       | not all ingredients are listed |
| TW      | TCSI       | all ingredients are listed     |
| US      | TSCA       | not all ingredients are listed |

#### Legend

| Legena     |   |
|------------|---|
| AIIC       | Australian Inventory of Industrial Chemicals                            |
| CICR       | Chemical Inventory and Control Regulation                               |
| CSCL-ENCS  | List of Existing and New Chemical Substances (CSCL-ENCS)                |
| DSL        | Domestic Substances List (DSL)  |
| ECSI       | EC Substance Inventory (EINECS, ELINCS, NLP)                            |
| IECSC      | Inventory of Existing Chemical Substances Produced or Imported in China |
| INSQ       | National Inventory of Chemical Substances                               |
| ISHA-ENCS  | Inventory of Existing and New Chemical Substances (ISHA-ENCS)           |
| KECI       | Korea Existing Chemicals Inventory                                      |
| NZIoC      | New Zealand Inventory of Chemicals                                      |
| PICCS      | Philippine Inventory of Chemicals and Chemical Substances (PICCS)       |
| REACH Reg. | REACH registered substances   |
| TCSI       | Taiwan Chemical Substance Inventory                                     |
| TSCA       | Toxic Substance Control Act   |
|            |   |

#### 15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

## SECTION 16: Other information, including date of preparation or last revision

### Abbreviations and acronyms

| Abbr.         | Descriptions of used abbreviations   |
|---------------|--|
| 49 CFR US DOT | 49 CFR U.S. Department of Transportation   |
| Acute Tox.    | Acute toxicity   |
| ATE           | Acute Toxicity Estimate  |
| CAS           | Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances) |



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| Abbr.          | Descriptions of used abbreviations  |
|----------------|---|
| DGR            | Dangerous Goods Regulations (see IATA/DGR)  |
| DNEL           | Derived No-Effect Level   |
| EINECS         | European Inventory of Existing Commercial Chemical Substances   |
| ELINCS         | European List of Notified Chemical Substances   |
| Eye Dam.       | Seriously damaging to the eye   |
| Eye Irrit.     | Irritant to the eye   |
| GHS            | "Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations     |
| IATA           | International Air Transport Association   |
| IATA/DGR       | Dangerous Goods Regulations (DGR) for the air transport (IATA)  |
| ICAO           | International Civil Aviation Organization   |
| IMDG           | International Maritime Dangerous Goods Code   |
| NLP            | No-Longer Polymer   |
| NPCA-HMIS® III | National Paint and Coatings Association: Hazardous Materials Identification System - HMIS® III, Third Edition |
| OSHA           | Occupational Safety and Health Administration (United States)   |
| РВТ            | Persistent, Bioaccumulative and Toxic   |
| PNEC           | Predicted No-Effect Concentration   |
| RTECS          | Registry of Toxic Effects of Chemical Substances (database of NIOSH with toxicological information)           |
| vPvB           | Very Persistent and very Bioaccumulative  |

#### Key literature references and sources for data

OSHA Hazard Communication Standard (HCS), 29 CFR 1910.1200.

Transport of dangerous goods by road or rail (49 CFR US DOT). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

#### **Classification procedure**

Physical and chemical properties: The classification is based on tested mixture. Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

### List of relevant phrases (code and full text as stated in section 2 and 3)

| Code | Text                           |
|------|--------------------------------|
| H301 | Toxic if swallowed.            |
| H311 | Toxic in contact with skin.    |
| H319 | Causes serious eye irritation. |
| H330 | Fatal if inhaled.              |



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## Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.



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office hours: Mon-Fri 08:00 AM - 05:00 PM

| SEC | TION 1: Identification  |  |  |  |
|-----|---|--|--|--|
| 1.1 | Product identifier  |  |  |  |
|     | Trade name  | RiboPrinter™ MP Base Pack Bis/Tris Buffer                            |  |  |
|     | Product code(s)   | SLN2001  |  |  |
| 1.2 | 2 Relevant identified uses of the substance or mixture and uses advised against   |  |  |  |
|     | Relevant identified uses  | Laboratory and analytical use  |  |  |
| 1.3 | Details of the supplier of the safety data sheet  |  |  |  |
|     | Qualicon Diagnostics LLC<br>941 Avenida Acaso<br>Camarillo CA 93012<br>United States  |  |  |  |
|     | Telephone: 1-302-695-5300<br>Telefax: 1-302-351-6454<br>e-mail: diagnostics.support@hygiena.com<br>Website: https://www.hygiena.com |  |  |  |
|     | e-mail (competent person)   | diagnostics.support@hygiena.com                                      |  |  |
| 1.4 | Emergency telephone number  |  |  |  |
|     | Emergency information service   | 1-302-695-5300<br>This number is only available during the following |  |  |

### SECTION 2: Hazard(s) identification

### 2.1 Classification of the substance or mixture

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200) This mixture does not meet the criteria for classification.

### 2.2 Label elements

Labelling acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200) not required

## 2.3 Other hazards

of no significance

### **SECTION 3: Composition/information on ingredients**

#### 3.1 Substances

Not relevant (mixture)

### 3.2 Mixtures



acc. to 29 CFR 1910.1200 App D

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#### Description of the mixture

| Name of substance       | Identifier          | Wt%       | Classification acc. to GHS | Pictograms |
|-------------------------|---------------------|-----------|----------------------------|------------|
| Water, distilled        | CAS No<br>7732-18-5 | ≥ 90      |                            |            |
| MES                     | CAS No<br>4432-31-9 | 1-<3      |                            |            |
| EDTA disodium dihydrate | CAS No<br>6381-92-6 | 0.1 - < 1 |                            |            |

For full text of abbreviations: see SECTION 16.

### SECTION 4: First-aid measures

#### 4.1 Description of first-aid measures

#### General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

#### Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. Provide fresh air.

#### Following skin contact

Wash with plenty of soap and water.

#### Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

#### Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

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

Symptoms and effects are not known to date.

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

none

### **SECTION 5: Fire-fighting measures**

#### 5.1 Extinguishing media

Suitable extinguishing media

Water spray, BC-powder, Carbon dioxide (CO2)

Unsuitable extinguishing media

Water jet

#### 5.2 Special hazards arising from the substance or mixture

Hazardous combustion products Nitrogen oxides (NOx)



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#### 5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Coordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

#### **SECTION 6: Accidental release measures**

#### 6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety.

#### For emergency responders

Wear breathing apparatus if exposed to vapors/dust/aerosols/gases.

#### 6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

#### 6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains

#### Advice on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

#### Appropriate containment techniques

Use of adsorbent materials.

#### Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

#### 6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

### **SECTION 7: Handling and storage**

### 7.1 Precautions for safe handling

#### Recommendations

- Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Use only in well-ventilated areas.

#### Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

#### 7.2 Conditions for safe storage, including any incompatibilities

#### Control of the effects

Protect against external exposure, such as

frost



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#### 7.3 Specific end use(s)

See section 16 for a general overview.

### **SECTION 8: Exposure controls/personal protection**

#### 8.1 Control parameters

This information is not available.

| Relevant DNELs of components of the mixture |           |          |                     |                                    |                   |                                 |
|---|-----------|----------|---------------------|------------------------------------|-------------------|---------------------------------|
| Name of substance                           | CAS No    | Endpoint | Threshold<br>level  | Protection goal, route of exposure | Used in           | Exposure time                   |
| EDTA disodium di-<br>hydrate                | 6381-92-6 | DNEL     | 1.5 mg/m³           | human, inhalatory                  | worker (industry) | chronic - systemic ef-<br>fects |
| EDTA disodium di-<br>hydrate                | 6381-92-6 | DNEL     | 3 mg/m³             | human, inhalatory                  | worker (industry) | acute - systemic ef-<br>fects   |
| EDTA disodium di-<br>hydrate                | 6381-92-6 | DNEL     | 1.5 mg/m³           | human, inhalatory                  | worker (industry) | chronic - local effects         |
| EDTA disodium di-<br>hydrate                | 6381-92-6 | DNEL     | 3 mg/m <sup>3</sup> | human, inhalatory                  | worker (industry) | acute - local effects           |

### Relevant PNECs of components of the mixture

| Name of substance            | CAS No    | Endpoint | Threshold<br>level                | Organism                   | Environmental com-<br>partment  | Exposure time                     |
|------------------------------|-----------|----------|-----------------------------------|----------------------------|---------------------------------|-----------------------------------|
| EDTA disodium di-<br>hydrate | 6381-92-6 | PNEC     | 2.5 <sup>mg</sup> / <sub>l</sub>  | aquatic organisms          | freshwater                      | short-term (single in-<br>stance) |
| EDTA disodium di-<br>hydrate | 6381-92-6 | PNEC     | 0.25 <sup>mg</sup> / <sub>l</sub> | aquatic organisms          | marine water                    | short-term (single in-<br>stance) |
| EDTA disodium di-<br>hydrate | 6381-92-6 | PNEC     | 50 <sup>mg</sup> / <sub>l</sub>   | aquatic organisms          | sewage treatment<br>plant (STP) | short-term (single in-<br>stance) |
| EDTA disodium di-<br>hydrate | 6381-92-6 | PNEC     | 1.1 <sup>mg</sup> / <sub>kg</sub> | terrestrial organ-<br>isms | soil                            | short-term (single in-<br>stance) |

### 8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

#### Eye/face protection

Wear eye/face protection.

#### Skin protection

- Hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.



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#### - Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

#### Respiratory protection

In case of inadequate ventilation wear respiratory protection.

#### Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

### **SECTION 9: Physical and chemical properties**

### 9.1 Information on basic physical and chemical properties

### Appearance

| Physical state | liquid                |
|----------------|-----------------------|
| Color          | not determined        |
| Particle       | not relevant (liquid) |
| Odor           | characteristic        |

#### Other safety parameters

| pH (value)                              | not determined                                |  |  |  |
|---|---|--|--|--|
| Melting point/freezing point            | 0 °C  |  |  |  |
| Initial boiling point and boiling range | 100 °C  |  |  |  |
| Flash point                             | not determined                                |  |  |  |
| Evaporation rate                        | Not determined                                |  |  |  |
| Flammability (solid, gas)               | not relevant, (fluid)                         |  |  |  |
| Vapor pressure                          | 0 Pa at 25 °C                                 |  |  |  |
| Density                                 | not determined                                |  |  |  |
| Vapor density                           | this information is not available             |  |  |  |
| Relative density                        | Information on this property is not available |  |  |  |
| Solubility(ies)                         | not determined                                |  |  |  |
| Partition coefficient                   |   |  |  |  |
| - n-octanol/water (log KOW)             | this information is not available             |  |  |  |



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### Auto-ignition temperature

| Viscosity            | not determined |
|----------------------|----------------|
| Explosive properties | none           |
| Oxidizing properties | none           |

#### 9.2 Other information

| Solvent content | 96.61 % |
|-----------------|---------|
| Solid content   | 3.394 % |

## **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

#### 10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

#### 10.3 Possibility of hazardous reactions

No known hazardous reactions.

#### 10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

#### 10.5 Incompatible materials

There is no additional information.

#### 10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

## **SECTION 11: Toxicological information**

#### 11.1 Information on toxicological effects

Test data are not available for the complete mixture.

#### Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

#### Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

This mixture does not meet the criteria for classification.

#### Acute toxicity

Shall not be classified as acutely toxic.

#### Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.



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Serious eye damage/eye irritation Shall not be classified as seriously damaging to the eye or eye irritant.

### Respiratory or skin sensitization

Shall not be classified as a respiratory or skin sensitizer.

#### Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

#### Carcinogenicity

Shall not be classified as carcinogenic.

#### Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

#### Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

#### Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

### **SECTION 12: Ecological information**

#### 12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

### 12.2 Persistence and degradability

Data are not available.

#### 12.3 Bioaccumulative potential

Data are not available.

### 12.4 Mobility in soil

Data are not available.

## 12.5 Results of PBT and vPvB assessment

Data are not available.

### 12.6 Endocrine disrupting properties

None of the ingredients are listed.

### 12.7 Other adverse effects

Data are not available.



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### **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

#### Waste treatment of containers/packages

Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

#### Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

| SECT | TON 14: Transport information |                        |
|------|-------------------------------|------------------------|
| 14.1 | UN number                     | not subject to transpo |

- 14.2 UN proper shipping name
- 14.3 Transport hazard class(es)
- 14.4 Packing group
- 14.5 Environmental hazards

ort regulations

- not relevant
- not assigned
- not assigned

non-environmentally hazardous acc. to the dangerous goods regulations

14.6 Special precautions for user

There is no additional information.

14.7 Transport in bulk according to IMO instruments The cargo is not intended to be carried in bulk.

### Information for each of the UN Model Regulations

Transport of dangerous goods by road or rail (49 CFR US DOT) - Additional information Not subject to transport regulations.

## International Maritime Dangerous Goods Code (IMDG) - Additional information Not subject to IMDG.

## International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information Not subject to ICAO-IATA.

## **SECTION 15: Regulatory information**

#### 15.1 Safety, health and environmental regulations specific for the product in question

#### National regulations (United States)

**Toxic Substance Control Act (TSCA)** all ingredients are listed

### Superfund Amendment and Reauthorization Act (SARA TITLE III)

- The List of Extremely Hazardous Substances and Their Threshold Planning Quantities (EPCRA Section 302, 304)

none of the ingredients are listed



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- Specific Toxic Chemical Listings (EPCRA Section 313) none of the ingredients are listed

### Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

- List of Hazardous Substances and Reportable Quantities (CERCLA section 102a) (40 CFR 302.4) none of the ingredients are listed

### **Clean Air Act**

none of the ingredients are listed

### **Right to Know Hazardous Substance List**

- Hazardous Substance List (NJ-RTK)
- none of the ingredients are listed

# California Environmental Protection Agency (Cal/EPA): Proposition 65 - Safe Drinking Water and Toxic Enforcement Act of 1987

none of the ingredients are listed

### Industry or sector specific available guidance(s)

### NPCA-HMIS® III

Hazardous Materials Identification System. American Coatings Association.

| Category            | Rating | Description  |
|---------------------|--------|--|
| Chronic             | /      | none   |
| Health              | 0      | no significant risk to health  |
| Flammability        | 0      | material that will not burn under typical fire conditions  |
| Physical hazard     | 0      | material that is normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosive |
| Personal protection | -      |  |

#### **NFPA® 704**

National Fire Protection Association: Standard System for the Identification of the Hazards of Materials for Emergency Response (United States).

| Category       | Degree of<br>hazard | Description  |  |  |  |  |
|----------------|---------------------|--|--|--|--|--|
| Flammability   | 0                   | material that will not burn under typical fire conditions  |  |  |  |  |
| Health         | 0                   | material that, under emergency conditions, would offer no hazard beyond that of ordin-<br>ary combustible material |  |  |  |  |
| Instability    | 0                   | material that is normally stable, even under fire conditions   |  |  |  |  |
| Special hazard |                     |  |  |  |  |  |



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### National inventories

| Country | Inventory  | Status                         |
|---------|------------|--------------------------------|
| AU      | AIIC       | all ingredients are listed     |
| CA      | DSL        | all ingredients are listed     |
| CA      | NDSL       | not all ingredients are listed |
| CN      | IECSC      | all ingredients are listed     |
| EU      | ECSI       | all ingredients are listed     |
| EU      | REACH Reg. | all ingredients are listed     |
| JP      | CSCL-ENCS  | not all ingredients are listed |
| JP      | ISHA-ENCS  | not all ingredients are listed |
| KR      | KECI       | all ingredients are listed     |
| MX      | INSQ       | not all ingredients are listed |
| NZ      | NZIoC      | all ingredients are listed     |
| PH      | PICCS      | not all ingredients are listed |
| TR      | CICR       | not all ingredients are listed |
| TW      | TCSI       | all ingredients are listed     |
| US      | TSCA       | all ingredients are listed     |

#### Legend

| Legena     |   |
|------------|---|
| AIIC       | Australian Inventory of Industrial Chemicals                            |
| CICR       | Chemical Inventory and Control Regulation                               |
| CSCL-ENCS  | List of Existing and New Chemical Substances (CSCL-ENCS)                |
| DSL        | Domestic Substances List (DSL)  |
| ECSI       | EC Substance Inventory (EINECS, ELINCS, NLP)                            |
| IECSC      | Inventory of Existing Chemical Substances Produced or Imported in China |
| INSQ       | National Inventory of Chemical Substances                               |
| ISHA-ENCS  | Inventory of Existing and New Chemical Substances (ISHA-ENCS)           |
| KECI       | Korea Existing Chemicals Inventory                                      |
| NDSL       | Non-domestic Substances List (NDSL)                                     |
| NZIoC      | New Zealand Inventory of Chemicals                                      |
| PICCS      | Philippine Inventory of Chemicals and Chemical Substances (PICCS)       |
| REACH Reg. | REACH registered substances   |
| TCSI       | Taiwan Chemical Substance Inventory                                     |
| TSCA       | Toxic Substance Control Act   |
|            |   |

### 15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

## SECTION 16: Other information, including date of preparation or last revision

### Abbreviations and acronyms



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| Abbr.          | Descriptions of used abbreviations  |
|----------------|---|
| 49 CFR US DOT  | 49 CFR U.S. Department of Transportation  |
| CAS            | Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)        |
| DGR            | Dangerous Goods Regulations (see IATA/DGR)  |
| DNEL           | Derived No-Effect Level   |
| EINECS         | European Inventory of Existing Commercial Chemical Substances   |
| ELINCS         | European List of Notified Chemical Substances   |
| GHS            | "Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations     |
| IATA           | International Air Transport Association   |
| IATA/DGR       | Dangerous Goods Regulations (DGR) for the air transport (IATA)  |
| ICAO           | International Civil Aviation Organization   |
| IMDG           | International Maritime Dangerous Goods Code   |
| NLP            | No-Longer Polymer   |
| NPCA-HMIS® III | National Paint and Coatings Association: Hazardous Materials Identification System - HMIS® III, Third Edition |
| OSHA           | Occupational Safety and Health Administration (United States)   |
| РВТ            | Persistent, Bioaccumulative and Toxic   |
| PNEC           | Predicted No-Effect Concentration   |
| RTECS          | Registry of Toxic Effects of Chemical Substances (database of NIOSH with toxicological information)           |
| vPvB           | Very Persistent and very Bioaccumulative  |

#### Key literature references and sources for data

OSHA Hazard Communication Standard (HCS), 29 CFR 1910.1200.

Transport of dangerous goods by road or rail (49 CFR US DOT). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

#### **Classification procedure**

Physical and chemical properties: The classification is based on tested mixture. Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

#### Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.



acc. to 29 CFR 1910.1200 App D

## **RiboPrinter™ MP Base Pack Denaturant**

Version number: 1.1 Date of compilation: 2022-04-26 **SECTION 1: Identification** 1.1 **Product identifier** Trade name **RiboPrinter<sup>™</sup> MP Base Pack Denaturant** Product code(s) SLN2002 Relevant identified uses of the substance or mixture and uses advised against 1.2 Relevant identified uses Laboratory and analytical use 1.3 Details of the supplier of the safety data sheet **Qualicon Diagnostics LLC** 941 Avenida Acaso Camarillo CA 93012 **United States** Telephone: 1-302-695-5300 Telefax: 1-302-351-6454 e-mail: diagnostics.support@hygiena.com Website: https://www.hygiena.com e-mail (competent person) diagnostics.support@hygiena.com **Emergency telephone number** 1.4

Emergency information service

1-302-695-5300 This number is only available during the following office hours: Mon-Fri 08:00 AM - 05:00 PM

## SECTION 2: Hazard(s) identification

## 2.1 Classification of the substance or mixture

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

| Section | Hazard class                      | Category | Hazard class and cat-<br>egory | Hazard state-<br>ment |
|---------|-----------------------------------|----------|--------------------------------|-----------------------|
| A.2     | skin corrosion/irritation         | 2        | Skin Irrit. 2                  | H315                  |
| A.3     | serious eye damage/eye irritation | 2        | Eye Irrit. 2                   | H319                  |

For full text of abbreviations: see SECTION 16.

## 2.2 Label elements

Labelling acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

- Signal word warning
- Pictograms

GHS07



## - Hazard statements

H315 H319 Causes skin irritation. Causes serious eye irritation.



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| - Precautionary statem | nents  |
|------------------------|--|
| P280                   | Wear protective gloves.  |
| P302+P352              | If on skin: Wash with plenty of water.   |
| P305+P351+P338         | If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P321                   | Specific treatment (see on this label).  |
| P332+P313              | If skin irritation occurs: Get medical advice/attention.   |
| P337+P313              | If eye irritation persists: Get medical advice/attention.  |
| P362                   | Take off contaminated clothing and wash it before reuse.   |

#### 2.3 Other hazards

of no significance

#### **SECTION 3: Composition/information on ingredients**

#### 3.1 Substances

Not relevant (mixture)

#### 3.2 Mixtures

#### Description of the mixture

| Name of substance | Identifier          | Wt%       | Classification acc. to GHS                | Pictograms |
|-------------------|---------------------|-----------|---|------------|
| Water, distilled  | CAS No<br>7732-18-5 | ≥ 90      |   |            |
| Sodium Hydroxide  | CAS No<br>1310-73-2 | 0.1 - < 1 | Skin Corr. 1A / H314<br>Eye Dam. 1 / H318 |            |

For full text of abbreviations: see SECTION 16.

#### **SECTION 4: First-aid measures**

#### 4.1 Description of first-aid measures

#### General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

#### Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. In case of respiratory tract irritation, consult a physician. Provide fresh air.

#### Following skin contact

Wash with plenty of soap and water.

#### Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

#### Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

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

Symptoms and effects are not known to date.



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

none

## **SECTION 5: Fire-fighting measures**

### 5.1 Extinguishing media

Suitable extinguishing media Water spray, BC-powder, Carbon dioxide (CO2)

Unsuitable extinguishing media

Water jet

#### 5.2 Special hazards arising from the substance or mixture

Hazardous combustion products Carbon monoxide (CO), Carbon dioxide (CO2)

### 5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Coordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

### **SECTION 6: Accidental release measures**

### 6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety.

For emergency responders

Wear breathing apparatus if exposed to vapors/dust/aerosols/gases.

#### 6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

#### 6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains

Advice on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

#### Appropriate containment techniques

Use of adsorbent materials.

#### Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

#### 6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.



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## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

#### Recommendations

- Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Use only in well-ventilated areas.

#### Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

### 7.2 Conditions for safe storage, including any incompatibilities

#### Control of the effects

Protect against external exposure, such as

frost

#### 7.3 Specific end use(s)

See section 16 for a general overview.

### **SECTION 8: Exposure controls/personal protection**

#### 8.1 Control parameters

Occupational exposure limit values (Workplace Exposure Limits)

| Occup        |                                    |           |                 |              |                |               |                 |                    |                      |               |                         |
|--------------|------------------------------------|-----------|-----------------|--------------|----------------|---------------|-----------------|--------------------|----------------------|---------------|-------------------------|
| Coun-<br>try | Name of agent                      | CAS No    | Identi-<br>fier | TWA<br>[ppm] | TWA<br>[mg/m³] | STEL<br>[ppm] | STEL<br>[mg/m³] | Ceiling-C<br>[ppm] | Ceiling-C<br>[mg/m³] | Nota-<br>tion | Source                  |
| US           | sodium hydroxide                   | 1310-73-2 | REL             |              |                |               |                 |                    | 2                    |               | NIOSH<br>REL            |
| US           | sodium hydroxide                   | 1310-73-2 | TLV®            |              |                |               |                 |                    | 2                    |               | ACGIH®<br>2022          |
| US           | sodium hydroxide                   | 1310-73-2 | PEL             |              | 2              |               |                 |                    |                      |               | 29 CFR<br>1910.100<br>0 |
| US           | sodium hydroxide<br>(caustic soda) | 1310-73-2 | PEL (CA)        |              |                |               |                 |                    | 2                    |               | Cal/<br>OSHA<br>PEL     |

Notation

Ceiling-C ceiling value is a limit value above which exposure should not occur

STEL short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)

TWA time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours timeweighted average (unless otherwise specified

| Relevant DNELs of components of the mixture |           |          |         |                                    |                   |                         |
|---|-----------|----------|---------|------------------------------------|-------------------|-------------------------|
| Name of substance                           | CAS No    | Endpoint |         | Protection goal, route of exposure | Used in           | Exposure time           |
| Sodium Hydroxide                            | 1310-73-2 | DNEL     | 1 mg/m³ | human, inhalatory                  | worker (industry) | chronic - local effects |



acc. to 29 CFR 1910.1200 App D

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#### 8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection.

Skin protection

- Hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

#### - Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

#### **Respiratory protection**

In case of inadequate ventilation wear respiratory protection.

#### Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

### **SECTION 9: Physical and chemical properties**

### 9.1 Information on basic physical and chemical properties

#### Appearance

| Physical state | liquid                |
|----------------|-----------------------|
| Color          | not determined        |
| Particle       | not relevant (liquid) |
| Odor           | characteristic        |

#### Other safety parameters

| pH (value)                              | not determined        |  |
|---|-----------------------|--|
| Melting point/freezing point            | not determined        |  |
| Initial boiling point and boiling range | 100 °C                |  |
| Flash point                             | not determined        |  |
| Evaporation rate                        | Not determined        |  |
| Flammability (solid, gas)               | not relevant, (fluid) |  |



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| Vapor pressure              | not determined                                |
|-----------------------------|---|
| Density                     | not determined                                |
| Vapor density               | this information is not available             |
| Relative density            | Information on this property is not available |
| Solubility(ies)             | not determined                                |
| Partition coefficient       |   |
| - n-octanol/water (log KOW) | this information is not available             |
| Auto-ignition temperature   | not determined                                |
| Viscosity                   | not determined                                |
| Explosive properties        | none  |
| Oxidizing properties        | none  |

## 9.2 Other information

| Solvent content | 90.43 % |
|-----------------|---------|
| Solid content   | 9.57 %  |

## **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

#### **10.2** Chemical stability

See below "Conditions to avoid".

#### 10.3 Possibility of hazardous reactions

No known hazardous reactions.

#### 10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

#### **10.5** Incompatible materials

Oxidizers

#### 10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.



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### SECTION 11: Toxicological information

#### 11.1 Information on toxicological effects

Test data are not available for the complete mixture.

#### Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

### Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

#### Acute toxicity

Shall not be classified as acutely toxic.

#### Skin corrosion/irritation

Causes skin irritation.

#### Serious eye damage/eye irritation

Causes serious eye irritation.

#### Respiratory or skin sensitization

Shall not be classified as a respiratory or skin sensitizer.

#### Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

#### Carcinogenicity Shall not be classified as carcinogenic.

## Reproductive toxicity

Shall not be classified as a reproductive toxicant.

#### Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

### Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

#### Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

## **SECTION 12: Ecological information**

### 12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

#### 12.2 Persistence and degradability

Data are not available.

### 12.3 Bioaccumulative potential

Data are not available.

#### 12.4 Mobility in soil

Data are not available.



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## 12.5 Results of PBT and vPvB assessment

Data are not available.

**12.6 Endocrine disrupting properties** None of the ingredients are listed.

#### 12.7 Other adverse effects

Data are not available.

### **SECTION 13: Disposal considerations**

### 13.1 Waste treatment methods

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packages

Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

#### Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

| SECT | SECTION 14: Transport information |  |  |  |  |
|------|-----------------------------------|--|--|--|--|
| 14.1 | UN number                         | not subject to transport regulations                                       |  |  |  |
| 14.2 | UN proper shipping name           | not relevant   |  |  |  |
| 14.3 | Transport hazard class(es)        | not assigned   |  |  |  |
| 14.4 | Packing group                     | not assigned   |  |  |  |
| 14.5 | Environmental hazards             | non-environmentally hazardous acc. to the danger-<br>ous goods regulations |  |  |  |
|      |                                   |  |  |  |  |

## 14.6 Special precautions for user

There is no additional information.

### 14.7 Transport in bulk according to IMO instruments

The cargo is not intended to be carried in bulk.

### Information for each of the UN Model Regulations

## **Transport of dangerous goods by road or rail (49 CFR US DOT) - Additional information** Not subject to transport regulations.

## International Maritime Dangerous Goods Code (IMDG) - Additional information

Not subject to IMDG.

### International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information Not subject to ICAO-IATA.



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## **SECTION 15: Regulatory information**

### 15.1 Safety, health and environmental regulations specific for the product in question

### National regulations (United States)

### Superfund Amendment and Reauthorization Act (SARA TITLE III )

- The List of Extremely Hazardous Substances and Their Threshold Planning Quantities (EPCRA Section 302, 304)

none of the ingredients are listed

- Specific Toxic Chemical Listings (EPCRA Section 313) none of the ingredients are listed

### Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

- List of Hazardous Substances and Reportable Quantities (CERCLA section 102a) (40 CFR 302.4)

| Name of substance | CAS No    | Remarks | Statutory code | Final RQ pounds (Kg) |
|-------------------|-----------|---------|----------------|----------------------|
| Sodium Hydroxide  | 1310-73-2 |         | 1              | 1000 (454)           |

Legend

"1" indicates that the statutory source is section 311(b)(2) of the Clean Water Act

### **Clean Air Act**

none of the ingredients are listed

### **Right to Know Hazardous Substance List**

#### - Hazardous Substance List (NJ-RTK)

| Name of substance | CAS No    | Remarks | Classifications |
|-------------------|-----------|---------|-----------------|
| Sodium Hydroxide  | 1310-73-2 |         | CO<br>R1        |

Legend

CO Corrosive

R1 Reactive - First Degree

# California Environmental Protection Agency (Cal/EPA): Proposition 65 - Safe Drinking Water and Toxic Enforcement Act of 1987

none of the ingredients are listed

### Industry or sector specific available guidance(s)

#### **NPCA-HMIS® III**

Hazardous Materials Identification System. American Coatings Association.

| Category     | Rating | Description   |
|--------------|--------|---|
| Chronic      | /      | none  |
| Health       | 2      | temporary or minor injury may occur                       |
| Flammability | 1      | material that must be preheated before ignition can occur |



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| Category            | Rating | Description  |
|---------------------|--------|--|
| Physical hazard     | 0      | material that is normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosive |
| Personal protection | -      |  |

## **NFPA® 704**

National Fire Protection Association: Standard System for the Identification of the Hazards of Materials for Emergency Response (United States).

| Category       | Degree of<br>hazard | Description   |
|----------------|---------------------|---|
| Flammability   | 1                   | material that must be preheated before ignition can occur   |
| Health         | 2                   | material that, under emergency conditions, can cause temporary incapacitation or resid-<br>ual injury |
| Instability    | 0                   | material that is normally stable, even under fire conditions  |
| Special hazard |                     |   |

### **National inventories**

| Country | Inventory  | Status                         |
|---------|------------|--------------------------------|
| AU      | AIIC       | not all ingredients are listed |
| CA      | DSL        | not all ingredients are listed |
| CN      | IECSC      | not all ingredients are listed |
| EU      | ECSI       | not all ingredients are listed |
| EU      | REACH Reg. | not all ingredients are listed |
| JP      | CSCL-ENCS  | not all ingredients are listed |
| KR      | KECI       | not all ingredients are listed |
| MX      | INSQ       | not all ingredients are listed |
| NZ      | NZIoC      | not all ingredients are listed |
| PH      | PICCS      | not all ingredients are listed |
| TR      | CICR       | not all ingredients are listed |
| TW      | TCSI       | not all ingredients are listed |
| US      | TSCA       | not all ingredients are listed |

#### Legend

| AIIC       | Australian Inventory of Industrial Chemicals                            |
|------------|---|
| CICR       | Chemical Inventory and Control Regulation                               |
| CSCL-ENCS  | List of Existing and New Chemical Substances (CSCL-ENCS)                |
| DSL        | Domestic Substances List (DSL)  |
| ECSI       | EC Substance Inventory (EINECS, ELINCS, NLP)                            |
| IECSC      | Inventory of Existing Chemical Substances Produced or Imported in China |
| INSQ       | National Inventory of Chemical Substances                               |
| KECI       | Korea Existing Chemicals Inventory                                      |
| NZIoC      | New Zealand Inventory of Chemicals                                      |
| PICCS      | Philippine Inventory of Chemicals and Chemical Substances (PICCS)       |
| REACH Reg. | REACH registered substances   |



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| Legend |                                     |
|--------|-------------------------------------|
| TCSI   | Taiwan Chemical Substance Inventory |
| TSCA   | Toxic Substance Control Act         |

### 15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

## SECTION 16: Other information, including date of preparation or last revision

### Abbreviations and acronyms

| Abbr.            | Descriptions of used abbreviations   |
|------------------|--|
| 29 CFR 1910.1000 | 29 CFR 1910.1000, Tables Z-1, Z-2, Z-3 - Occupational Safety and Health Standards: Toxic and Hazardous Sub-<br>stances (permissible exposure limits)   |
| 49 CFR US DOT    | 49 CFR U.S. Department of Transportation   |
| ACGIH® 2022      | From ACGIH®, 2022 TLVs® and BEIs® Book. Copyright 2022. Reprinted with permission. Information on the proper use of the TLVs® and BEIs®: http://www.acgih.org/tlv-bei-guidelines/policies-procedures-presenta-tions/tlv-bei-position-statement |
| Cal/OSHA PEL     | California Division of Occupational Safety and Health (Cal/OSHA): Permissible Exposure Limits (PELs)   |
| CAS              | Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)   |
| Ceiling-C        | Ceiling value  |
| DGR              | Dangerous Goods Regulations (see IATA/DGR)   |
| DNEL             | Derived No-Effect Level  |
| EINECS           | European Inventory of Existing Commercial Chemical Substances  |
| ELINCS           | European List of Notified Chemical Substances  |
| Eye Dam.         | Seriously damaging to the eye  |
| Eye Irrit.       | Irritant to the eye  |
| GHS              | "Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations  |
| IATA             | International Air Transport Association  |
| IATA/DGR         | Dangerous Goods Regulations (DGR) for the air transport (IATA)   |
| ICAO             | International Civil Aviation Organization  |
| IMDG             | International Maritime Dangerous Goods Code  |
| NIOSH REL        | National Institute for Occupational Safety and Health (NIOSH): Recommended Exposure Limits (RELs)  |
| NLP              | No-Longer Polymer  |
| NPCA-HMIS® III   | National Paint and Coatings Association: Hazardous Materials Identification System - HMIS® III, Third Edition  |
| OSHA             | Occupational Safety and Health Administration (United States)  |
| PBT              | Persistent, Bioaccumulative and Toxic  |
| PEL              | Permissible exposure limit   |
| ppm              | Parts per million  |



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| Abbr.       | Descriptions of used abbreviations  |
|-------------|---|
| RTECS       | Registry of Toxic Effects of Chemical Substances (database of NIOSH with toxicological information) |
| Skin Corr.  | Corrosive to skin   |
| Skin Irrit. | Irritant to skin  |
| STEL        | Short-term exposure limit   |
| TLV®        | Threshold Limit Values  |
| TWA         | Time-weighted average   |
| vPvB        | Very Persistent and very Bioaccumulative  |

#### Key literature references and sources for data

OSHA Hazard Communication Standard (HCS), 29 CFR 1910.1200.

Transport of dangerous goods by road or rail (49 CFR US DOT). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

#### **Classification procedure**

Physical and chemical properties: The classification is based on tested mixture. Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

### List of relevant phrases (code and full text as stated in section 2 and 3)

| Code | Text                                     |
|------|--|
| H314 | Causes severe skin burns and eye damage. |
| H315 | Causes skin irritation.                  |
| H318 | Causes serious eye damage.               |
| H319 | Causes serious eye irritation.           |

#### Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.



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## **RiboPrinter™ MP Base Pack Post Conjugate Wash**

| Versio | n number: 1.1   | Date of compilation: 2022-04-26   |
|--------|---|---|
| SECT   | TON 1: Identification   |   |
| 1.1    | Product identifier  |   |
|        | Trade name  | RiboPrinter™ MP Base Pack Post Conjugate<br>Wash  |
|        | Product code(s)   | SLN2013   |
| 1.2    | Relevant identified uses of the substance or mixt   | ure and uses advised against  |
|        | Relevant identified uses  | Laboratory and analytical use   |
| 1.3    | Details of the supplier of the safety data sheet  |   |
|        | Qualicon Diagnostics LLC<br>941 Avenida Acaso<br>Camarillo CA 93012<br>United States  |   |
|        | Telephone: 1-302-695-5300<br>Telefax: 1-302-351-6454<br>e-mail: diagnostics.support@hygiena.com<br>Website: https://www.hygiena.com |   |
|        | e-mail (competent person)   | diagnostics.support@hygiena.com   |
| 1.4    | Emergency telephone number  |   |
|        | Emergency information service   | 1-302-695-5300<br>This number is only available during the following<br>office hours: Mon-Fri 08:00 AM - 05:00 PM |

## SECTION 2: Hazard(s) identification

## 2.1 Classification of the substance or mixture

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200) This mixture does not meet the criteria for classification.

## 2.2 Label elements

Labelling acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200) not required

## 2.3 Other hazards

of no significance

## **SECTION 3: Composition/information on ingredients**

#### 3.1 Substances

Not relevant (mixture)

### 3.2 Mixtures



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#### Description of the mixture

| Name of substance                     | Identifier          | Wt%       | Classification acc. to GHS | Pictograms |
|---------------------------------------|---------------------|-----------|----------------------------|------------|
| Water, distilled CAS No<br>7732-18-5  |                     | 50 - < 75 |                            |            |
| Sodium Chloride                       | CAS No<br>7647-14-5 | 25 - < 50 |                            |            |
| Tween 20 CAS No   9005-64-5 9005-64-5 |                     | 0.1 - < 1 |                            |            |
| Tris CAS No<br>77-86-1                |                     | 0.1 - < 1 |                            |            |

For full text of abbreviations: see SECTION 16.

## **SECTION 4: First-aid measures**

#### 4.1 Description of first-aid measures

#### General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

#### Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. Provide fresh air.

#### Following skin contact

Wash with plenty of soap and water.

#### Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

#### Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

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

Symptoms and effects are not known to date.

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

none

### **SECTION 5: Fire-fighting measures**

#### 5.1 Extinguishing media

Suitable extinguishing media

Water spray, BC-powder, Carbon dioxide (CO2)

Unsuitable extinguishing media

Water jet



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#### 5.2 Special hazards arising from the substance or mixture

#### Hazardous combustion products

Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO2)

#### 5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Coordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

#### **SECTION 6: Accidental release measures**

#### 6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety.

#### For emergency responders

Wear breathing apparatus if exposed to vapors/dust/aerosols/gases.

#### 6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

#### 6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains

Advice on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

#### Appropriate containment techniques

Use of adsorbent materials.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

#### 6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

### **SECTION 7: Handling and storage**

#### 7.1 Precautions for safe handling

#### Recommendations

- Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Use only in well-ventilated areas.

#### Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.



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## 7.2 Conditions for safe storage, including any incompatibilities

Control of the effects

Protect against external exposure, such as frost

### 7.3 Specific end use(s)

See section 16 for a general overview.

## **SECTION 8: Exposure controls/personal protection**

### 8.1 Control parameters

This information is not available.

| Relevant DNELs of components of the mixture |         |          |                         |                                    |                   |                                 |
|---|---------|----------|-------------------------|------------------------------------|-------------------|---------------------------------|
| Name of substance                           | CAS No  | Endpoint | Threshold<br>level      | Protection goal, route of exposure | Used in           | Exposure time                   |
| Tris  | 77-86-1 | DNEL     | 117.5 mg/m <sup>3</sup> | human, inhalatory                  | worker (industry) | chronic - systemic ef-<br>fects |
| Tris  | 77-86-1 | DNEL     | 166.7 mg/kg<br>bw/day   | human, dermal                      | worker (industry) | chronic - systemic ef-<br>fects |

| Relevant PNECs of components of the mixture |           |          |                                     |                   |                                 |                                   |
|---|-----------|----------|-------------------------------------|-------------------|---------------------------------|-----------------------------------|
| Name of substance                           | CAS No    | Endpoint | Threshold<br>level                  | Organism          | Environmental com-<br>partment  | Exposure time                     |
| Tween 20                                    | 9005-64-5 | PNEC     | 0.2 <sup>mg</sup> / <sub>l</sub>    | aquatic organisms | freshwater                      | short-term (single in-<br>stance) |
| Tween 20                                    | 9005-64-5 | PNEC     | 0.02 <sup>mg</sup> / <sub>l</sub>   | aquatic organisms | marine water                    | short-term (single in-<br>stance) |
| Tween 20                                    | 9005-64-5 | PNEC     | 1.141 <sup>mg</sup> / <sub>kg</sub> | aquatic organisms | freshwater sediment             | short-term (single in-<br>stance) |
| Tween 20                                    | 9005-64-5 | PNEC     | 1,000 <sup>mg</sup> / <sub>kg</sub> | aquatic organisms | marine sediment                 | short-term (single in-<br>stance) |
| Tris  | 77-86-1   | PNEC     | 300 <sup>mg</sup> / <sub>l</sub>    | aquatic organisms | sewage treatment<br>plant (STP) | short-term (single in-<br>stance) |

### 8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection.



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#### Skin protection

- Hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

#### - Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

#### Respiratory protection

In case of inadequate ventilation wear respiratory protection.

#### Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

### **SECTION 9: Physical and chemical properties**

#### 9.1 Information on basic physical and chemical properties

#### Appearance

| Physical state | liquid                |
|----------------|-----------------------|
| Color          | not determined        |
| Particle       | not relevant (liquid) |
| Odor           | characteristic        |

#### Other safety parameters

| pH (value)                              | not determined                                |
|---|---|
| Melting point/freezing point            | not determined                                |
| Initial boiling point and boiling range | 100 °C  |
| Flash point                             | not determined                                |
| Evaporation rate                        | Not determined                                |
| Flammability (solid, gas)               | not relevant, (fluid)                         |
| Vapor pressure                          | 0 Pa at 20 °C                                 |
| Density                                 | not determined                                |
| Vapor density                           | this information is not available             |
| Relative density                        | Information on this property is not available |



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| Solubility(ies)             | not determined                    |
|-----------------------------|-----------------------------------|
| Partition coefficient       |                                   |
| - n-octanol/water (log KOW) | this information is not available |
| Auto-ignition temperature   | not determined                    |
| Viscosity                   | not determined                    |
| Explosive properties        | none                              |
| Oxidizing properties        | none                              |

### 9.2 Other information

| Solvent content | 66.91 % |
|-----------------|---------|
| Solid content   | 33.1 %  |

## **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

#### 10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

#### 10.3 Possibility of hazardous reactions

No known hazardous reactions.

#### 10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

### 10.5 Incompatible materials

Oxidizers

#### 10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

## **SECTION 11: Toxicological information**

#### **11.1** Information on toxicological effects

Test data are not available for the complete mixture.

#### Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

#### Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

This mixture does not meet the criteria for classification.



Acute toxicity

## Safety Data Sheet

acc. to 29 CFR 1910.1200 App D

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## Shall not be classified as acutely toxic. Skin corrosion/irritation Shall not be classified as corrosive/irritant to skin. Serious eye damage/eye irritation Shall not be classified as seriously damaging to the eye or eye irritant. Respiratory or skin sensitization Shall not be classified as a respiratory or skin sensitizer. Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

#### Carcinogenicity

Shall not be classified as carcinogenic.

#### Reproductive toxicity

Shall not be classified as a reproductive toxicant.

#### Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

#### Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

#### Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

## **SECTION 12: Ecological information**

## 12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

#### 12.2 Persistence and degradability

Data are not available.

12.3 Bioaccumulative potential

Data are not available.

### 12.4 Mobility in soil

Data are not available.

## 12.5 Results of PBT and vPvB assessment

Data are not available.

## 12.6 Endocrine disrupting properties

None of the ingredients are listed.

### 12.7 Other adverse effects

Data are not available.



acc. to 29 CFR 1910.1200 App D

## **RiboPrinter™ MP Base Pack Post Conjugate Wash**

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### **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

#### Waste treatment of containers/packages

Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

#### Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

| SECTION 14: Transport information |           |                               |  |  |
|-----------------------------------|-----------|-------------------------------|--|--|
| 14.1                              | UN number | not subject to transport regu |  |  |

- 14.2 UN proper shipping name
- 14.3 Transport hazard class(es)
- 14.4 Packing group
- 14.5 Environmental hazards

gulations

- not relevant
- not assigned
- not assigned

non-environmentally hazardous acc. to the dangerous goods regulations

## 14.6 Special precautions for user

There is no additional information.

14.7 Transport in bulk according to IMO instruments

The cargo is not intended to be carried in bulk.

### Information for each of the UN Model Regulations

## Transport of dangerous goods by road or rail (49 CFR US DOT) - Additional information Not subject to transport regulations.

## International Maritime Dangerous Goods Code (IMDG) - Additional information Not subject to IMDG.

## International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information Not subject to ICAO-IATA.

## **SECTION 15: Regulatory information**

#### 15.1 Safety, health and environmental regulations specific for the product in question

### National regulations (United States)

### Superfund Amendment and Reauthorization Act (SARA TITLE III)

- The List of Extremely Hazardous Substances and Their Threshold Planning Quantities (EPCRA Section 302, 304)

none of the ingredients are listed



acc. to 29 CFR 1910.1200 App D

## **RiboPrinter™ MP Base Pack Post Conjugate Wash**

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- Specific Toxic Chemical Listings (EPCRA Section 313) none of the ingredients are listed

## Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

- List of Hazardous Substances and Reportable Quantities (CERCLA section 102a) (40 CFR 302.4) none of the ingredients are listed

### **Clean Air Act**

none of the ingredients are listed

### **Right to Know Hazardous Substance List**

- Hazardous Substance List (NJ-RTK)
- none of the ingredients are listed

# California Environmental Protection Agency (Cal/EPA): Proposition 65 - Safe Drinking Water and Toxic Enforcement Act of 1987

none of the ingredients are listed

### Industry or sector specific available guidance(s)

### NPCA-HMIS® III

Hazardous Materials Identification System. American Coatings Association.

| Category            | Rating | Description  |
|---------------------|--------|--|
| Chronic             | /      | none   |
| Health              | 0      | no significant risk to health  |
| Flammability        | 1      | material that must be preheated before ignition can occur  |
| Physical hazard     | 0      | material that is normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosive |
| Personal protection | -      |  |

#### **NFPA® 704**

National Fire Protection Association: Standard System for the Identification of the Hazards of Materials for Emergency Response (United States).

| Category       | Degree of<br>hazard | Description  |  |
|----------------|---------------------|--|--|
| Flammability   | 1                   | material that must be preheated before ignition can occur  |  |
| Health         | 0                   | material that, under emergency conditions, would offer no hazard beyond that of ordin-<br>ary combustible material |  |
| Instability    | 0                   | material that is normally stable, even under fire conditions   |  |
| Special hazard |                     |  |  |



acc. to 29 CFR 1910.1200 App D

## **RiboPrinter™ MP Base Pack Post Conjugate Wash**

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Date of compilation: 2022-04-26

#### National inventories

| Country | Inventory  | Status                         |
|---------|------------|--------------------------------|
| AU      | AIIC       | not all ingredients are listed |
| CA      | DSL        | not all ingredients are listed |
| CN      | IECSC      | not all ingredients are listed |
| EU      | ECSI       | not all ingredients are listed |
| EU      | REACH Reg. | not all ingredients are listed |
| JP      | CSCL-ENCS  | not all ingredients are listed |
| KR      | KECI       | not all ingredients are listed |
| MX      | INSQ       | not all ingredients are listed |
| NZ      | NZIoC      | not all ingredients are listed |
| PH      | PICCS      | not all ingredients are listed |
| TR      | CICR       | not all ingredients are listed |
| TW      | TCSI       | not all ingredients are listed |
| US      | TSCA       | not all ingredients are listed |

### Legend

| 2090.00    |   |
|------------|---|
| AIIC       | Australian Inventory of Industrial Chemicals                            |
| CICR       | Chemical Inventory and Control Regulation                               |
| CSCL-ENCS  | List of Existing and New Chemical Substances (CSCL-ENCS)                |
| DSL        | Domestic Substances List (DSL)  |
| ECSI       | EC Substance Inventory (EINECS, ELINCS, NLP)                            |
| IECSC      | Inventory of Existing Chemical Substances Produced or Imported in China |
| INSQ       | National Inventory of Chemical Substances                               |
| KECI       | Korea Existing Chemicals Inventory                                      |
| NZIoC      | New Zealand Inventory of Chemicals                                      |
| PICCS      | Philippine Inventory of Chemicals and Chemical Substances (PICCS)       |
| REACH Reg. | REACH registered substances   |
| TCSI       | Taiwan Chemical Substance Inventory                                     |
| TSCA       | Toxic Substance Control Act   |
|            |   |

### 15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

## SECTION 16: Other information, including date of preparation or last revision

### Abbreviations and acronyms

| Abbr.         | Descriptions of used abbreviations   |
|---------------|--|
| 49 CFR US DOT | 49 CFR U.S. Department of Transportation   |
| CAS           | Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances) |
| DGR           | Dangerous Goods Regulations (see IATA/DGR)   |
| DNEL          | Derived No-Effect Level  |
| EINECS        | European Inventory of Existing Commercial Chemical Substances  |
|               |  |



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| Abbr.          | Descriptions of used abbreviations  |  |
|----------------|---|--|
| ELINCS         | European List of Notified Chemical Substances   |  |
| GHS            | "Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations     |  |
| IATA           | International Air Transport Association   |  |
| IATA/DGR       | Dangerous Goods Regulations (DGR) for the air transport (IATA)  |  |
| ICAO           | International Civil Aviation Organization   |  |
| IMDG           | International Maritime Dangerous Goods Code   |  |
| NLP            | No-Longer Polymer   |  |
| NPCA-HMIS® III | National Paint and Coatings Association: Hazardous Materials Identification System - HMIS® III, Third Edition |  |
| OSHA           | Occupational Safety and Health Administration (United States)   |  |
| PBT            | Persistent, Bioaccumulative and Toxic   |  |
| PNEC           | Predicted No-Effect Concentration   |  |
| RTECS          | Registry of Toxic Effects of Chemical Substances (database of NIOSH with toxicological information)           |  |
| vPvB           | Very Persistent and very Bioaccumulative  |  |

### Key literature references and sources for data

OSHA Hazard Communication Standard (HCS), 29 CFR 1910.1200.

Transport of dangerous goods by road or rail (49 CFR US DOT). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

#### **Classification procedure**

Physical and chemical properties: The classification is based on tested mixture. Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

#### Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.



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## **RiboPrinter™ MP Base Post Hybridization Wash**

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Date of compilation: 2022-04-26

| SEC | TION 1: Identification  |   |
|-----|---|---|
| 1.1 | Product identifier  |   |
|     | Trade name  | RiboPrinter™ MP Base Post Hybridization Wash  |
|     | Product code(s)   | SLN2014   |
| 1.2 | Relevant identified uses of the substance or mix  | ture and uses advised against   |
|     | Relevant identified uses  | Laboratory and analytical use   |
| 1.3 | Details of the supplier of the safety data sheet  |   |
|     | Qualicon Diagnostics LLC<br>941 Avenida Acaso<br>Camarillo CA 93012<br>United States  |   |
|     | Telephone: 1-302-695-5300<br>Telefax: 1-302-351-6454<br>e-mail: diagnostics.support@hygiena.com<br>Website: https://www.hygiena.com |   |
|     | e-mail (competent person)   | diagnostics.support@hygiena.com   |
| 1.4 | Emergency telephone number  |   |
|     | Emergency information service   | 1-302-695-5300<br>This number is only available during the following<br>office hours: Mon-Fri 08:00 AM - 05:00 PM |

## SECTION 2: Hazard(s) identification

## 2.1 Classification of the substance or mixture

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200) This mixture does not meet the criteria for classification.

## 2.2 Label elements

Labelling acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200) not required

### 2.3 Other hazards

of no significance

## SECTION 3: Composition/information on ingredients

#### 3.1 Substances

Not relevant (mixture)

#### 3.2 Mixtures



acc. to 29 CFR 1910.1200 App D

## **RiboPrinter™ MP Base Post Hybridization Wash**

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#### Description of the mixture

| Name of substance      | Identifier          | Wt%       | Classification acc. to GHS | Pictograms |
|------------------------|---------------------|-----------|----------------------------|------------|
| Pyrogen Free Water     | CAS No<br>7732-18-5 | ≥ 90      |                            |            |
| Sodium Chloride        | CAS No<br>7647-14-5 | 1-<3      |                            |            |
| Sodium dodecyl sulfate | CAS No<br>151-21-3  | 0.1 - < 1 | Acute Tox. 4 / H302        | (!)        |

For full text of abbreviations: see SECTION 16.

### **SECTION 4: First-aid measures**

#### 4.1 Description of first-aid measures

#### General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

#### Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. Provide fresh air.

#### Following skin contact

Wash with plenty of soap and water.

#### Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

#### Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

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

Symptoms and effects are not known to date.

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

none

## **SECTION 5: Fire-fighting measures**

### 5.1 Extinguishing media

Suitable extinguishing media

Water spray, BC-powder, Carbon dioxide (CO2)

### Unsuitable extinguishing media

Water jet



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### 5.2 Special hazards arising from the substance or mixture

#### 5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Coordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

## **SECTION 6: Accidental release measures**

#### 6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety.

For emergency responders

Wear breathing apparatus if exposed to vapors/dust/aerosols/gases.

#### 6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

#### 6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains

Advice on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

#### Appropriate containment techniques

Use of adsorbent materials.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

#### 6.4 Reference to other sections

Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

### **SECTION 7: Handling and storage**

#### 7.1 Precautions for safe handling

#### Recommendations

- Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Use only in well-ventilated areas.

#### Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

### 7.2 Conditions for safe storage, including any incompatibilities

#### Control of the effects

Protect against external exposure, such as

frost



acc. to 29 CFR 1910.1200 App D

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#### 7.3 Specific end use(s)

See section 16 for a general overview.

### **SECTION 8: Exposure controls/personal protection**

#### 8.1 Control parameters

This information is not available.

| Relevant DNELs of components of the mixture |          |          |                       |                                    |                   |                                 |
|---|----------|----------|-----------------------|------------------------------------|-------------------|---------------------------------|
| Name of substance                           | CAS No   | Endpoint | Threshold<br>level    | Protection goal, route of exposure | Used in           | Exposure time                   |
| Sodium dodecyl<br>sulfate                   | 151-21-3 | DNEL     | 285 mg/m <sup>3</sup> | human, inhalatory                  | worker (industry) | chronic - systemic ef-<br>fects |
| Sodium dodecyl<br>sulfate                   | 151-21-3 | DNEL     | 4,060 mg/kg<br>bw/day | human, dermal                      | worker (industry) | chronic - systemic ef-<br>fects |

### Relevant PNECs of components of the mixture

| •                         |          |          |                                     |                            |                                 |                                   |
|---------------------------|----------|----------|-------------------------------------|----------------------------|---------------------------------|-----------------------------------|
| Name of substance         | CAS No   | Endpoint | Threshold<br>level                  | Organism                   | Environmental com-<br>partment  | Exposure time                     |
| Sodium dodecyl<br>sulfate | 151-21-3 | PNEC     | 0.176 <sup>mg</sup> / <sub>l</sub>  | aquatic organisms          | freshwater                      | short-term (single in-<br>stance) |
| Sodium dodecyl<br>sulfate | 151-21-3 | PNEC     | 0.018 <sup>mg</sup> / <sub>l</sub>  | aquatic organisms          | marine water                    | short-term (single in-<br>stance) |
| Sodium dodecyl<br>sulfate | 151-21-3 | PNEC     | 1.35 <sup>mg</sup> / <sub>l</sub>   | aquatic organisms          | sewage treatment<br>plant (STP) | short-term (single in-<br>stance) |
| Sodium dodecyl<br>sulfate | 151-21-3 | PNEC     | 6.97 <sup>mg</sup> / <sub>kg</sub>  | aquatic organisms          | freshwater sediment             | short-term (single in-<br>stance) |
| Sodium dodecyl<br>sulfate | 151-21-3 | PNEC     | 0.697 <sup>mg</sup> / <sub>kg</sub> | aquatic organisms          | marine sediment                 | short-term (single in-<br>stance) |
| Sodium dodecyl<br>sulfate | 151-21-3 | PNEC     | 1.29 <sup>mg</sup> / <sub>kg</sub>  | terrestrial organ-<br>isms | soil                            | short-term (single in-<br>stance) |

### 8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

#### Eye/face protection

Wear eye/face protection.

#### Skin protection

- Hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.



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#### - Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

#### Respiratory protection

In case of inadequate ventilation wear respiratory protection.

#### Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

### **SECTION 9: Physical and chemical properties**

### 9.1 Information on basic physical and chemical properties

### Appearance

| Physical state | liquid                |
|----------------|-----------------------|
| Color          | not determined        |
| Particle       | not relevant (liquid) |
| Odor           | characteristic        |

#### Other safety parameters

| pH (value)                              | not determined                                |
|---|---|
| Melting point/freezing point            | not determined                                |
| Initial boiling point and boiling range | 100 °C  |
| Flash point                             | not determined                                |
| Evaporation rate                        | Not determined                                |
| Flammability (solid, gas)               | not relevant, (fluid)                         |
| Vapor pressure                          | not determined                                |
| Density                                 | not determined                                |
| Vapor density                           | this information is not available             |
| Relative density                        | Information on this property is not available |
| Solubility(ies)                         | not determined                                |
| Partition coefficient                   |   |
| - n-octanol/water (log KOW)             | this information is not available             |
|   |   |



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| Auto-ignition temperature | not determined |
|---------------------------|----------------|
| Viscosity                 | not determined |
| Explosive properties      | none           |
| Oxidizing properties      | none           |

#### 9.2 Other information

| Solvent content | 98.05 % |  |
|-----------------|---------|--|
| Solid content   | 1.95 %  |  |

## **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

#### 10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

### 10.3 Possibility of hazardous reactions

No known hazardous reactions.

#### 10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

#### 10.5 Incompatible materials

There is no additional information.

#### **10.6** Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

### **SECTION 11: Toxicological information**

#### 11.1 Information on toxicological effects

Test data are not available for the complete mixture.

#### Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

#### Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

This mixture does not meet the criteria for classification.

#### Acute toxicity

Shall not be classified as acutely toxic.



acc. to 29 CFR 1910.1200 App D

## **RiboPrinter™ MP Base Post Hybridization Wash**

| Versior | number: 1.1   |                       | Date           | of compilation: 2022-04-26          |
|---------|---|-----------------------|----------------|-------------------------------------|
|         | Acute toxicity estimate (ATE) of components of the mixture  |                       |                |                                     |
|         | Name of substance   | CAS No                | Exposure route | ATE                                 |
|         | Sodium dodecyl sulfate  | 151-21-3              | oral           | 1,200 <sup>mg</sup> / <sub>kg</sub> |
|         | Skin corrosion/irritation<br>Shall not be classified as corrosive/irritant to skin  | ı.                    |                |                                     |
|         | Serious eye damage/eye irritation<br>Shall not be classified as seriously damaging to the seriously damaging to the seriously damaging to the serious s | he eye or eye irritar | nt.            |                                     |
|         | Respiratory or skin sensitization<br>Shall not be classified as a respiratory or skin sen   | sitizer.              |                |                                     |
|         | Germ cell mutagenicity<br>Shall not be classified as germ cell mutagenic.   |                       |                |                                     |
|         | Carcinogenicity<br>Shall not be classified as carcinogenic.   |                       |                |                                     |
|         | Reproductive toxicity<br>Shall not be classified as a reproductive toxicant.  |                       |                |                                     |
|         | Specific target organ toxicity - single expos<br>Shall not be classified as a specific target organ t   |                       | osure).        |                                     |
|         | Specific target organ toxicity - repeated exp<br>Shall not be classified as a specific target organ to  |                       | xposure).      |                                     |
|         | Aspiration hazard<br>Shall not be classified as presenting an aspiratior  | n hazard.             |                |                                     |
| SECT    | TON 12: Ecological information  |                       |                |                                     |
| 12.1    | <b>Toxicity</b><br>Shall not be classified as hazardous to the aquati   | c environment.        |                |                                     |
| 12.2    | <b>Persistence and degradability</b><br>Data are not available.   |                       |                |                                     |
| 12.3    | <b>Bioaccumulative potential</b><br>Data are not available.   |                       |                |                                     |
| 12.4    | <b>Mobility in soil</b><br>Data are not available.  |                       |                |                                     |
| 12.5    | <b>Results of PBT and vPvB assessment</b><br>Data are not available.  |                       |                |                                     |

Data are not available.

## 12.6 Endocrine disrupting properties

None of the ingredients are listed.



acc. to 29 CFR 1910.1200 App D

## **RiboPrinter™ MP Base Post Hybridization Wash**

Version number: 1.1

Date of compilation: 2022-04-26

### 12.7 Other adverse effects

Data are not available.

### **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

#### Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

#### Waste treatment of containers/packages

Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

#### Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

## **SECTION 14: Transport information**

- 14.1 UN number
- 14.2 UN proper shipping name
- 14.3 Transport hazard class(es)
- 14.4 Packing group
- 14.5 Environmental hazards

not relevant

not subject to transport regulations

- not assigned
- not assigned

non-environmentally hazardous acc. to the dangerous goods regulations

## 14.6 Special precautions for user

There is no additional information.

#### 14.7 Transport in bulk according to IMO instruments

The cargo is not intended to be carried in bulk.

### Information for each of the UN Model Regulations

## **Transport of dangerous goods by road or rail (49 CFR US DOT) - Additional information** Not subject to transport regulations.

## International Maritime Dangerous Goods Code (IMDG) - Additional information Not subject to IMDG.

## International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information Not subject to ICAO-IATA.



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## **RiboPrinter™ MP Base Post Hybridization Wash**

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## **SECTION 15: Regulatory information**

### 15.1 Safety, health and environmental regulations specific for the product in question

### National regulations (United States)

### Superfund Amendment and Reauthorization Act (SARA TITLE III )

- The List of Extremely Hazardous Substances and Their Threshold Planning Quantities (EPCRA Section 302, 304)

none of the ingredients are listed

- Specific Toxic Chemical Listings (EPCRA Section 313) none of the ingredients are listed

### Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

- List of Hazardous Substances and Reportable Quantities (CERCLA section 102a) (40 CFR 302.4) none of the ingredients are listed

Clean Air Act

none of the ingredients are listed

### **Right to Know Hazardous Substance List**

- Hazardous Substance List (NJ-RTK)
- none of the ingredients are listed

# California Environmental Protection Agency (Cal/EPA): Proposition 65 - Safe Drinking Water and Toxic Enforcement Act of 1987

none of the ingredients are listed

### Industry or sector specific available guidance(s)

### NPCA-HMIS® III

Hazardous Materials Identification System. American Coatings Association.

| Category            | Rating | Description  |  |
|---------------------|--------|--|--|
| Chronic             | /      | none   |  |
| Health              | 0      | no significant risk to health  |  |
| Flammability        | 0      | material that will not burn under typical fire conditions  |  |
| Physical hazard     | 0      | material that is normally stable, even under fire conditions, and will not react with we polymerize, decompose, condense, or self-react. Non-explosive |  |
| Personal protection | -      |  |  |

#### **NFPA® 704**

National Fire Protection Association: Standard System for the Identification of the Hazards of Materials for Emergency Response (United States).



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| Category       | Degree of<br>hazard | Description  |
|----------------|---------------------|--|
| Flammability   | 0                   | material that will not burn under typical fire conditions  |
| Health         | 0                   | material that, under emergency conditions, would offer no hazard beyond that of ordin-<br>ary combustible material |
| Instability    | 0                   | material that is normally stable, even under fire conditions   |
| Special hazard |                     |  |

## **National inventories**

| Country | Inventory  | Status                         |
|---------|------------|--------------------------------|
| AU      | AIIC       | not all ingredients are listed |
| CA      | DSL        | not all ingredients are listed |
| CN      | IECSC      | not all ingredients are listed |
| EU      | ECSI       | not all ingredients are listed |
| EU      | REACH Reg. | not all ingredients are listed |
| JP      | CSCL-ENCS  | not all ingredients are listed |
| KR      | KECI       | not all ingredients are listed |
| MX      | INSQ       | not all ingredients are listed |
| NZ      | NZIoC      | not all ingredients are listed |
| PH      | PICCS      | not all ingredients are listed |
| TR      | CICR       | not all ingredients are listed |
| TW      | TCSI       | not all ingredients are listed |
| US      | TSCA       | not all ingredients are listed |

Legend

| AIIC       | Australian Inventory of Industrial Chemicals                            |
|------------|---|
| CICR       | Chemical Inventory and Control Regulation                               |
| CSCL-ENCS  | List of Existing and New Chemical Substances (CSCL-ENCS)                |
| DSL        | Domestic Substances List (DSL)  |
| ECSI       | EC Substance Inventory (EINECS, ELINCS, NLP)                            |
| IECSC      | Inventory of Existing Chemical Substances Produced or Imported in China |
| INSQ       | National Inventory of Chemical Substances                               |
| KECI       | Korea Existing Chemicals Inventory                                      |
| NZIoC      | New Zealand Inventory of Chemicals                                      |
| PICCS      | Philippine Inventory of Chemicals and Chemical Substances (PICCS)       |
| REACH Reg. | REACH registered substances   |
| TCSI       | Taiwan Chemical Substance Inventory                                     |
| TSCA       | Toxic Substance Control Act   |
|            |   |

## 15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.



acc. to 29 CFR 1910.1200 App D

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## SECTION 16: Other information, including date of preparation or last revision

#### Abbreviations and acronyms

| Abbr.          | Descriptions of used abbreviations  |
|----------------|---|
| 49 CFR US DOT  | 49 CFR U.S. Department of Transportation  |
| Acute Tox.     | Acute toxicity  |
| ATE            | Acute Toxicity Estimate   |
| CAS            | Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)        |
| DGR            | Dangerous Goods Regulations (see IATA/DGR)  |
| DNEL           | Derived No-Effect Level   |
| EINECS         | European Inventory of Existing Commercial Chemical Substances   |
| ELINCS         | European List of Notified Chemical Substances   |
| GHS            | "Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations     |
| ΙΑΤΑ           | International Air Transport Association   |
| IATA/DGR       | Dangerous Goods Regulations (DGR) for the air transport (IATA)  |
| ICAO           | International Civil Aviation Organization   |
| IMDG           | International Maritime Dangerous Goods Code   |
| NLP            | No-Longer Polymer   |
| NPCA-HMIS® III | National Paint and Coatings Association: Hazardous Materials Identification System - HMIS® III, Third Edition |
| OSHA           | Occupational Safety and Health Administration (United States)   |
| РВТ            | Persistent, Bioaccumulative and Toxic   |
| PNEC           | Predicted No-Effect Concentration   |
| RTECS          | Registry of Toxic Effects of Chemical Substances (database of NIOSH with toxicological information)           |
| vPvB           | Very Persistent and very Bioaccumulative  |

#### Key literature references and sources for data

OSHA Hazard Communication Standard (HCS), 29 CFR 1910.1200.

Transport of dangerous goods by road or rail (49 CFR US DOT). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

#### **Classification procedure**

Physical and chemical properties: The classification is based on tested mixture. Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

#### List of relevant phrases (code and full text as stated in section 2 and 3)

| Code | Text                  |
|------|-----------------------|
| H302 | Harmful if swallowed. |



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## Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.