



# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:  
REACH Regulation (EC) No 1907/2006, as retained in UK law by (SI 2019/758 as amended)

Revision date 10-Apr-2025

Version 4

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

Product name Monarch Plasmid Wash Buffer 1

Product No T1014

**Discontinued**

Pure substance/mixture Mixture

Contains Guanidine Hydrochloride; Isopropyl Alcohol

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use This product is for research and development only

Uses advised against No information available

### 1.3. Details of the supplier of the safety data sheet

#### Supplier

New England BioLabs  
240 County Road  
Ipswich, MA 01938  
USA

For further information, please contact

Contact Point 978-927-5054, 800-632-5227 (toll free)

E-mail address info@neb.com

### 1.4. Emergency telephone number

Emergency Telephone Chemtrec +44 20 3885 0382

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

GB CLP (SI 2020/1567 as amended)

|                       |                     |
|-----------------------|---------------------|
| Flammable liquids     | Category 3 - (H226) |
| Acute toxicity - Oral | Category 4 - (H302) |
| Skin irritation       | Category 2 - (H315) |

|                                                    |                     |
|----------------------------------------------------|---------------------|
| Eye irritation                                     | Category 2 - (H319) |
| Specific target organ toxicity (single exposure)   | Category 3 - (H336) |
| Category 3 Target organ effects: Narcotic effects. |                     |

**2.2. Label elements**

Contains Guanidine Hydrochloride; Isopropyl Alcohol

**Signal word**

Warning

**Hazard statements**

H226 - Flammable liquid and vapor.

H302 - Harmful if swallowed.

H315 - Causes skin irritation.

H319 - Causes serious eye irritation.

H336 - May cause drowsiness or dizziness.

**Precautionary statements**

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P261 - Avoid breathing dust, fume, gas, mist, vapors and spray.

P264 - Wash face, hands and any exposed skin thoroughly after handling.

P321 - Specific treatment (see .? on this label).

P370 + P378 - In case of fire: Use dry chemical, CO<sub>2</sub>, water spray or alcohol-resistant foam to extinguish.

P501 - Dispose of contents and container in accordance with local, regional, national, and international regulations as applicable.

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 - If eye irritation persists: Get medical advice/attention.

**Unknown acute toxicity****Additional information**

This product requires tactile warnings if supplied to the general public.

**2.3. Other hazards****Other hazards**

No information available.

**SECTION 3: Composition/information on ingredients****3.1 Substances**

Not applicable

**3.2 Mixtures**

| Chemical name | Weight-% | EC No (EU Index No) | UK REACH registration number | Classification according to GB CLP (SI 2020/1567 as amended)       | Specific concentration limit (SCL) | M-Factor | M-Factor (long-term) | Notes |
|---------------|----------|---------------------|------------------------------|--------------------------------------------------------------------|------------------------------------|----------|----------------------|-------|
| Trade Secret  | 30 - 40% | .?                  | -                            | Acute Tox. 4 (H302)<br>Skin Irrit. 2 (H315)<br>Eye Irrit. 2 (H319) | -                                  | -        | -                    | -     |
| Trade Secret  | 30 - 40% | .?                  | -                            | Flam. Liq. 2 (H225)<br>Eye Irrit. 2 (H319)<br>STOT SE 3 (H336)     | -                                  | -        | -                    | -     |

**Full text of H- and EUH-phrases: see section 16****Acute Toxicity Estimate**

In the absence of LD50/LC50 data, the conversion value (converted acute toxicity point estimate) may be indicated here; please note that these values do not represent test results

| Chemical name | Oral LD50 mg/kg | Dermal LD50 mg/kg | Inhalation LC50 - 4 hour - dust/mist - mg/L | Inhalation LC50 - 4 hour - vapor - mg/L | Inhalation LC50 - 4 hour - gas - ppm |
|---------------|-----------------|-------------------|---------------------------------------------|-----------------------------------------|--------------------------------------|
| Trade Secret  | 773.6<br>907.1  | 2000              | No data available                           | No data available                       | No data available                    |
| Trade Secret  | 1870            | 4059              | No data available                           | 30.1002                                 | No data available                    |

This product does not contain candidate substances of very high concern at a concentration  $\geq 0.1\%$  (UK REACH Article 59)

**SECTION 4: First aid measures****4.1. Description of first aid measures**

|                                           |                                                                                                                                                                                                                                                                                                                |
|-------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>General advice</b>                     | Show this safety data sheet to the doctor in attendance.                                                                                                                                                                                                                                                       |
| <b>Inhalation</b>                         | Remove to fresh air. IF exposed or concerned: Get medical advice/attention. Get medical attention immediately if symptoms occur.                                                                                                                                                                               |
| <b>Eye contact</b>                        | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.                            |
| <b>Skin contact</b>                       | Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention if irritation develops and persists.                                                                                                                                               |
| <b>Ingestion</b>                          | Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician.                                                                                                                                                                                                  |
| <b>Self-protection of the first aider</b> | Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. |

**4.2. Most important symptoms and effects, both acute and delayed**

|                            |                                                                                                                                                                                    |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Symptoms</b>            | May cause redness and tearing of the eyes. Burning sensation. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting. |
| <b>Effects of Exposure</b> | No information available.                                                                                                                                                          |

**4.3. Indication of any immediate medical attention and special treatment needed**

|                           |                        |
|---------------------------|------------------------|
| <b>Note to physicians</b> | Treat symptomatically. |
|---------------------------|------------------------|

**SECTION 5: Firefighting measures****5.1. Extinguishing media**

**Suitable Extinguishing Media** Dry chemical. Carbon dioxide (CO<sub>2</sub>). Water spray. Alcohol resistant foam.

**Large Fire** CAUTION: Use of water spray when fighting fire may be inefficient.

**Unsuitable extinguishing media** Do not scatter spilled material with high pressure water streams.

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

**Specific hazards arising from the chemical** Risk of ignition. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

### **5.3. Advice for firefighters**

**Special protective equipment and precautions for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

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

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

**Personal precautions** Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material.

**Other information** Ventilate the area. Refer to protective measures listed in Sections 7 and 8.

**For emergency responders** Use personal protection recommended in Section 8.

### **6.2. Environmental precautions**

**Environmental precautions** Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

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

**Methods for containment** Stop leak if you can do it without risk. Do not touch or walk through spilled material. A vapor suppressing foam may be used to reduce vapors. Dike far ahead of spill to collect runoff water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

**Methods for cleaning up** Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

### **6.4. Reference to other sections**

**Reference to other sections** See section 8 for more information. See section 13 for more information.

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

### **7.1. Precautions for safe handling**

|                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|---------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Advice on safe handling</b>        | Use personal protection equipment. Avoid breathing vapors or mists. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use with local exhaust ventilation. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. In case of insufficient ventilation, wear suitable respiratory equipment. |
| <b>General hygiene considerations</b> | Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Wear suitable gloves and eye/face protection. Avoid contact with skin, eyes or clothing.                                                                                                                                                                                                                                                                                                                                                                                                                |

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

|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Storage Conditions</b> | Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations. Keep out of the reach of children. |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## **7.3. Specific end use(s)**

**Risk management methods [RMM]** The information required is contained in this Safety Data Sheet.

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

## **8.1. Control parameters**

### **Exposure Limits**

| Chemical name | United Kingdom                                                                              |
|---------------|---------------------------------------------------------------------------------------------|
| Trade Secret  | TWA: 400 ppm<br>TWA: 999 mg/m <sup>3</sup><br>STEL: 500 ppm<br>STEL: 1250 mg/m <sup>3</sup> |

**Biological occupational exposure limits** This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

### **Derived No Effect Level (DNEL) - Workers**

#### **Notes**

|     |                          |
|-----|--------------------------|
| [4] | Systemic health effects. |
| [6] | Long term.               |
| [7] | Short term.              |

### **Derived No Effect Level (DNEL) - General Public**

#### **Notes**

|     |                          |
|-----|--------------------------|
| [4] | Systemic health effects. |
| [6] | Long term.               |

### **Predicted No Effect Concentration (PNEC)**

**8.2. Exposure controls**

|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Engineering controls</b>                                                         | No information available.                                                                                                                                                                                                                                                                                                                                      |
| <b><u>Individual protection measures, such as personal protective equipment</u></b> |                                                                                                                                                                                                                                                                                                                                                                |
| <b>Eye/face protection</b>                                                          | Tight sealing safety goggles.                                                                                                                                                                                                                                                                                                                                  |
| <b>Hand protection</b>                                                              | Wear suitable gloves. Impervious gloves.                                                                                                                                                                                                                                                                                                                       |
| <b>Skin and body protection</b>                                                     | Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron. Antistatic boots.                                                                                                                                                                                                                                                          |
| <b>Respiratory protection</b>                                                       | No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.                                                                                                                                                                                       |
| <b>General hygiene considerations</b>                                               | Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Wear suitable gloves and eye/face protection. Avoid contact with skin, eyes or clothing. |

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

|                       |                          |
|-----------------------|--------------------------|
| <b>Physical state</b> | Liquid                   |
| <b>Appearance</b>     | Colorless                |
| <b>Color</b>          | No information available |
| <b>Odor</b>           | Alcohol.                 |
| <b>Odor threshold</b> | No information available |

| <b><u>Property</u></b>                         | <b><u>Values</u></b> | <b><u>Remarks • Method</u></b> |
|------------------------------------------------|----------------------|--------------------------------|
| <b>Melting point / freezing point</b>          | No data available    | None known                     |
| <b>Initial boiling point and boiling range</b> | 87 °C                | None known                     |
| <b>Flammability (solid, gas)</b>               | No data available    | None known                     |
| <b>Flammability Limit in Air</b>               |                      | None known                     |
| <b>Upper flammability or explosive limits</b>  | No data available    |                                |
| <b>Lower flammability or explosive limits</b>  | No data available    |                                |
| <b>Flash point</b>                             | 26 °C                | ASTM D-93                      |
| <b>Autoignition temperature</b>                | 399 °C               |                                |
| <b>Decomposition temperature</b>               |                      | None known                     |
| <b>pH</b>                                      | 4.80-5.00            |                                |
| <b>pH (as aqueous solution)</b>                | No data available    | None known                     |
| <b>Kinematic viscosity</b>                     | No data available    | None known                     |
| <b>Dynamic viscosity</b>                       | No data available    | None known                     |
| <b>Water solubility</b>                        | No data available    | None known                     |
| <b>Solubility(ies)</b>                         | No data available    | None known                     |
| <b>Partition coefficient</b>                   | No data available    | None known                     |
| <b>Vapor pressure</b>                          | No data available    | None known                     |
| <b>Relative density</b>                        | No data available    | None known                     |
| <b>Bulk density</b>                            | No data available    |                                |
| <b>Liquid Density</b>                          | No data available    |                                |

|                            |                          |            |
|----------------------------|--------------------------|------------|
| Vapor density              | No data available        | None known |
| Particle characteristics   |                          |            |
| Particle Size              | No information available |            |
| Particle Size Distribution | No information available |            |
| Explosive properties       | No information available |            |
| Oxidizing properties       | No information available |            |

## 9.2. Other information

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

### 10.1. Reactivity

Reactivity No information available.

### 10.2. Chemical stability

Stability Stable under normal conditions.

### Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge Yes.

### 10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

### 10.4. Conditions to avoid

Conditions to avoid Heat, flames and sparks.

### 10.5. Incompatible materials

Incompatible materials Strong acids. Strong bases. Strong oxidizing agents.

### 10.6. Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

## **SECTION 11: Toxicological information**

### 11.1. Toxicological information

#### Information on likely routes of exposure

#### Product Information

|              |                                                                                                                                                                                                |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Inhalation   | Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract. May cause drowsiness or dizziness.                                                |
| Eye contact  | Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components). May cause redness, itching, and pain.                                  |
| Skin contact | Specific test data for the substance or mixture is not available. Causes skin irritation. (based on components).                                                                               |
| Ingestion    | Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Harmful if swallowed. (based on components). |

#### Symptoms related to the physical, chemical and toxicological characteristics

**Symptoms** Redness. May cause redness and tearing of the eyes. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

**Acute toxicity** Harmful if swallowed.

#### Numerical measures of toxicity

The following ATE values have been calculated for the mixture

|                               |                |
|-------------------------------|----------------|
| ATEmix (oral)                 | 1,688.70 mg/kg |
| ATEmix (dermal)               | 4,150.90 mg/kg |
| ATEmix (inhalation-gas)       | 99,999.00 ppm  |
| ATEmix (inhalation-vapor)     | 66.8224 mg/l   |
| ATEmix (inhalation-dust/mist) | 99,999.00 mg/l |

#### Unknown acute toxicity

##### Component Information

| Chemical name | Oral LD50                                      | Dermal LD50             | Inhalation LC50                                      |
|---------------|------------------------------------------------|-------------------------|------------------------------------------------------|
| Trade Secret  | = 773.6 mg/kg ( Rat )<br>= 907.1 mg/kg ( Rat ) | > 2000 mg/kg ( Rabbit ) | = 3.181 mg/L ( Rat ) 4 h<br>= 7.655 mg/L ( Rat ) 4 h |
| Trade Secret  | = 1870 mg/kg ( Rat )                           | = 4059 mg/kg ( Rabbit ) | > 10000 ppm ( Rat ) 6 h                              |

#### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Skin corrosion/irritation** Classification based on data available for ingredients. Causes skin irritation.

**Serious eye damage/eye irritation** Classification based on data available for ingredients. Causes serious eye irritation.

**Respiratory or skin sensitization** No information available.

**Germ cell mutagenicity** No information available.

**Carcinogenicity** No information available.

**Reproductive toxicity** No information available.

**STOT - single exposure** May cause drowsiness or dizziness.

**STOT - repeated exposure** No information available.

**Aspiration hazard** No information available.

**Other adverse effects** No information available.

## SECTION 12: Ecological information

### 12.1. Toxicity

**Ecotoxicity**

| Chemical name | Algae/aquatic plants                                                                                             | Fish                                                                                                                                                               | Toxicity to microorganisms | Crustacea                                     |
|---------------|------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-----------------------------------------------|
| Trade Secret  | EC50: >1000mg/L (96h, <i>Desmodesmus subspicatus</i> )<br>EC50: >1000mg/L (72h, <i>Desmodesmus subspicatus</i> ) | LC50: =9640mg/L (96h, <i>Pimephales promelas</i> )<br>LC50: =11130mg/L (96h, <i>Pimephales promelas</i> )<br>LC50: >1400000µg/L (96h, <i>Lepomis macrochirus</i> ) | -                          | EC50: =13299mg/L (48h, <i>Daphnia magna</i> ) |

**12.2. Persistence and degradability**

**Persistence and degradability** No information available.

**12.3. Bioaccumulative potential****Bioaccumulation****Component Information**

| Chemical name | Partition coefficient |
|---------------|-----------------------|
| Trade Secret  | -1.7                  |
| Trade Secret  | 0.05                  |

**12.4. Mobility in soil**

**Mobility in soil** No information available.

**12.5. Results of PBT and vPvB assessment**

**PBT and vPvB assessment** The product does not contain any substance(s) classified as PBT or vPvB above the threshold of declaration.

| Chemical name | PBT and vPvB assessment |
|---------------|-------------------------|
| Trade Secret  | Not PBT/vPvB            |
| Trade Secret  | Not PBT/vPvB            |

**12.6. Other adverse effects**

No information available.

**SECTION 13: Disposal considerations****13.1. Waste treatment methods**

**Waste from residues/unused products** Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

**Contaminated packaging** Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers.

**Other information** Waste codes should be assigned by the user based on the application for which the product was used.

**SECTION 14: Transport information****IATA**

|                                          |                |
|------------------------------------------|----------------|
| <b>14.1 UN number or ID number</b>       | UN1993         |
| <b>14.2</b>                              |                |
| <b>14.3 Transport hazard class(es)</b>   | 3              |
| <b>14.4 Packing group</b>                | II             |
| <b>14.5 Environmental hazard</b>         | Not applicable |
| <b>14.6 Special precautions for user</b> |                |
| <b>Special Provisions</b>                | None           |

**IMDG**

|                                                              |                          |
|--------------------------------------------------------------|--------------------------|
| 14.1 UN number or ID number                                  | Not regulated            |
| 14.2                                                         |                          |
| 14.3 Transport hazard class(es)                              | Not regulated            |
| 14.4 Packing group                                           | Not regulated            |
| 14.5 Environmental hazard                                    | Not applicable           |
| 14.6 Special precautions for user                            |                          |
| Special Provisions                                           | None                     |
| 14.7 Maritime transport in bulk according to IMO instruments | No information available |

**RID**

|                                   |                |
|-----------------------------------|----------------|
| 14.1 UN number or ID number       | Not regulated  |
| 14.2                              |                |
| 14.3 Transport hazard class(es)   | Not regulated  |
| 14.4 Packing group                | Not regulated  |
| 14.5 Environmental hazard         | Not applicable |
| 14.6 Special precautions for user |                |
| Special Provisions                | None           |

**ADR**

|                                   |                |
|-----------------------------------|----------------|
| 14.1 UN number or ID number       | Not regulated  |
| 14.2                              |                |
| 14.3 Transport hazard class(es)   | Not regulated  |
| 14.4 Packing group                | Not regulated  |
| 14.5 Environmental hazard         | Not applicable |
| 14.6 Special precautions for user |                |
| Special Provisions                | None           |

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations****Authorizations and/or restrictions on use:**

This product does not contain substances subject to authorization (UK REACH - Annex XIV). This product does not contain substances subject to restriction (UK REACH - Annex XVII).

**Persistent Organic Pollutants**

Not applicable

**Export Notification requirements**

Not applicable

**Dangerous substance category per COMAH (SI 2015/483 as amended)**

P5a - FLAMMABLE LIQUIDS

P5b - FLAMMABLE LIQUIDS

P5c - FLAMMABLE LIQUIDS

**Named dangerous substances per COMAH (SI 2015/483 as amended)**

Not applicable

**The Ozone-Depleting Substances Regulations 2015**

Not applicable

**The Biocidal Products Regulations 2001 (as amended)**

| Chemical name  | The Biocidal Products Regulations 2001 (as amended)                                                                   |
|----------------|-----------------------------------------------------------------------------------------------------------------------|
| Trade Secret - | Product-type 2: Disinfectants and algaecides not intended for direct application to humans or animals Product-type 4: |

Food and feed area Product-type 1: Human hygiene

**The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017 (as amended)**

Not applicable

**Poisons and Explosive Precursors**

Not applicable

**International Inventories**

|                      |                                                  |
|----------------------|--------------------------------------------------|
| <b>TSCA</b>          | Contact supplier for inventory compliance status |
| <b>DSL/NDL</b>       | Contact supplier for inventory compliance status |
| <b>EINECS/ELINCS</b> | Contact supplier for inventory compliance status |
| <b>ENCS</b>          | Contact supplier for inventory compliance status |
| <b>IECSC</b>         | Contact supplier for inventory compliance status |
| <b>KECL</b>          | Contact supplier for inventory compliance status |
| <b>PICCS</b>         | Contact supplier for inventory compliance status |
| <b>AIC</b>           | Contact supplier for inventory compliance status |
| <b>NZIoC</b>         | Contact supplier for inventory compliance status |
| <b>TCSI</b>          | Contact supplier for inventory compliance status |

**Legend:**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing Chemicals Inventory  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances  
**NZIoC** - New Zealand Inventory of Chemicals  
**TCSI** - Taiwan Chemical Substance Inventory

**15.2. Chemical safety assessment**

**Chemical Safety Report** No information available

**SECTION 16: Other information****Key or legend to abbreviations and acronyms used in the safety data sheet****Full text of any hazard and/or precautionary statements referred to under Sections 2-15**

H225 - Highly flammable liquid and vapor  
H302 - Harmful if swallowed  
H315 - Causes skin irritation  
H319 - Causes serious eye irritation  
H336 - May cause drowsiness or dizziness

**Legend**

SVHC: Substances of Very High Concern for Authorization:  
PBT: Persistent, Bioaccumulative, and Toxic (PBT) Substances  
vPvB: Very Persistent and very Bioaccumulative (vPvB) Substances  
STOT: Specific Target Organ Toxicity  
ATE: Acute Toxicity Estimate  
LC50: 50% Lethal Concentration  
LD50: 50% Lethal Dose

**Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

|         |                             |      |                                  |
|---------|-----------------------------|------|----------------------------------|
| TWA     | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value         | Sk*  | Skin designation                 |
| +       | Sensitizers                 |      |                                  |

**Classification procedure**

| Classification according to GB CLP (SI 2020/1567 as amended) | Method Used        |
|--------------------------------------------------------------|--------------------|
| Acute oral toxicity                                          | Calculation method |
| Acute dermal toxicity                                        | Calculation method |
| Acute inhalation toxicity - gas                              | Calculation method |
| Acute inhalation toxicity - vapor                            | Calculation method |
| Acute inhalation toxicity - dust/mist                        | Calculation method |
| Skin corrosion/irritation                                    | Calculation method |
| Serious eye damage/eye irritation                            | Calculation method |
| Respiratory sensitization                                    | Calculation method |
| Skin sensitization                                           | Calculation method |
| Mutagenicity                                                 | Calculation method |
| Carcinogenicity                                              | Calculation method |
| Reproductive toxicity                                        | Calculation method |
| STOT - single exposure                                       | Calculation method |
| STOT - repeated exposure                                     | Calculation method |
| Acute aquatic toxicity                                       | Calculation method |
| Chronic aquatic toxicity                                     | Calculation method |
| Aspiration hazard                                            | Calculation method |
| Ozone                                                        | Calculation method |

**Key literature references and sources for data used to compile the SDS**

Agency for Toxic Substances and Disease Registry (ATSDR)  
 U.S. Environmental Protection Agency ChemView Database  
 European Food Safety Authority (EFSA)  
 European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA\_RAC)  
 European Chemicals Agency (ECHA) (ECHA\_API)  
 Environmental Protection Agency  
 Acute Exposure Guideline Level(s) (AEGL(s))  
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
 U.S. Environmental Protection Agency High Production Volume Chemicals  
 Food Research Journal  
 Hazardous Substance Database  
 International Uniform Chemical Information Database (IUCLID)  
 National Institute of Technology and Evaluation (NITE)  
 Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
 NIOSH (National Institute for Occupational Safety and Health)  
 National Library of Medicine's ChemID Plus (NLM CIP)  
 National Library of Medicine's PubMed database (NLM PUBMED)  
 U.S. National Toxicology Program (NTP)  
 New Zealand's Chemical Classification and Information Database (CCID)  
 Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
 Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
 Organization for Economic Co-operation and Development Screening Information Data Set  
 World Health Organization

**Revision date** 10-Apr-2025

**Further information** SDS is valid 3 years from revision date. Contact info@neb.com for latest revision

**This SDS complies with the requirements of UK REACH Regulations SI 2019/758 (as amended)**

**Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work**

**Disclaimer**

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**End of Safety Data Sheet**