


# SAFETY DATA SHEET

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by UK REACH Regulation SI 2019/758

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

### 1.1 Product identifier

Product name	<b>Detection reagent 1; part of 'ECL™ direct nucleic acid labelling and detection system; To label 10 µg'</b>	
Catalogue Number	RPN3001	 9 0 R P N 3 0 0 1
Component Number	RPN3004V1	
Product description	Not available.	
Product type	Liquid.	
Other means of identification	Not available.	

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

#### Identified uses

Analytical chemistry.  
Laboratory chemicals  
Scientific research and development

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

<b>Supplier</b>	Cytiva Amersham Place Little Chalfont Buckinghamshire HP7 9NA United Kingdom +44 1494 508000	<b>Hours of operation</b> 08.30 - 17.00
<b>Person who prepared the SDS :</b> sds_author@cytiva.com		

### 1.4 Emergency telephone number

<b>United Kingdom (UK)</b>	Cytiva UK Amersham Place Little Chalfont Buckinghamshire HP7 9NA t: 0870 606 1921	Call INFOTRAC 24 Hour number: 001-352-323-3500 (Call Collect).
----------------------------	--	---

### National advisory body/Poison Centre

<b>United Kingdom (UK)</b>	Health professionals should contact the National Poisons Information Service (NPIS) by telephone, or use TOXBASE <a href="http://www.toxbase.org">www.toxbase.org</a> .  NPIS <a href="http://www.npis.org/">http://www.npis.org/</a> advise that others seeking specific information on poisons should contact: In England and Wales: NHS Direct - 0845 4647 or 111 In Scotland: NHS 24 - 08454 24 24 24 In N Ireland: Contact your local GP or pharmacist during normal hours; click here ( <a href="http://www.gpoutofhours.hscni.net/">www.gpoutofhours.hscni.net/</a> ) for GP services Out-of-Hours.
----------------------------	---

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definitionMixture

Classification according to UK CLP/GHS

Repr. 1B, H360FD

The product is classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictograms



Signal wordDanger

Hazard statementsMay damage fertility. May damage the unborn child.

Precautionary statements

GeneralNot applicable.

PreventionObtain special instructions before use. Wear protective gloves, protective clothing, eye protection, face protection, or hearing protection.

ResponseIf exposed or concerned: Get medical advice or attention.

StorageNot applicable.

DisposalDispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental label elementsContains reaction mass of 5-chloro-2- methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articlesRestricted to professional users.

Special packaging requirements

Containers to be fitted with child-resistant fasteningsNot applicable.

Tactile warning of dangerNot applicable.

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other hazards which do not result in classificationNone known.

SECTION 3: Composition/information on ingredients

3.2 MixturesMixture

Product/ingredient name	Identifiers	%	Classification	Type
Boric acid	REACH #: 01-2119486683-25 EC: 233-139-2 CAS: 10043-35-3 Index: 005-007-00-2	0.5 - 0.99	Repr. 1B, H360FD	[1] [3]
sodium hydroxide	REACH #: 01-2119457892-27 EC: 215-185-5 CAS: 1310-73-2 Index: 011-002-00-6	0.1 - 0.5	Skin Corr. 1A, H314 Eye Dam. 1, H318	[1] [2]
reaction mass of 5-chloro-2- methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3- one (3:1)	CAS: 55965-84-9 Index: 613-167-00-5	0.0005 - 0.00125	Acute Tox. 3, H301 Acute Tox. 2, H310 Acute Tox. 2, H330 Skin Corr. 1C, H314 Eye Dam. 1, H318	[1]

Skin Sens. 1A, H317  
Aquatic Acute 1, H400  
(M=100)  
Aquatic Chronic 1, H410  
(M=100)  
EUH071

See Section 16 for the full text of the H statements declared above.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

- [1] Substance classified with a physical, health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Substance with carcinogenic, mutagenic or reproductive toxicity properties

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Skin contact	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Protection of first-aiders	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

Over-exposure signs/symptoms

Eye contact	No specific data.
Inhalation	Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations
Skin contact	Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations
Ingestion	Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	No specific treatment.



## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

**Suitable extinguishing media** Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable extinguishing media** None known.

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

**Hazards from the substance or mixture** In a fire or if heated, a pressure increase will occur and the container may burst.

**Hazardous combustion products** No specific data.

### 5.3 Advice for firefighters

**Special precautions for fire-fighters** Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

**Special protective equipment for fire-fighters** Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to British standard BS EN 469 will provide a basic level of protection for chemical incidents.

## SECTION 6: Accidental release measures

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

**For non-emergency personnel** No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

**For emergency responders** If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

### 6.2 Environmental precautions

Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

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

**Small spill** Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

**Large spill** Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

### 6.4 Reference to other sections

See Section 1 for emergency contact information.  
See Section 8 for information on appropriate personal protective equipment.  
See Section 13 for additional waste treatment information.

## SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

### 7.1 Precautions for safe handling

**Protective measures** Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

**Advice on general occupational hygiene** Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

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



Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)

Recommendations	Analytical chemistry. Laboratory chemicals. Scientific research and development.
Industrial sector specific solutions	Not available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
Sodium hydroxide	EH40/2005 WELs (United Kingdom (UK), 1/2020) STEL 15 minutes: 2 mg/m³.

Biological exposure indices

No exposure indices known.

Recommended monitoring procedures

Reference should be made to monitoring standards, such as the following: British Standard BS EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) British Standard BS EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) British Standard BS EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs



Product/ingredient name	Result
Boric acid	<p><b>DNEL - General population - Short term - Oral</b> 0.98 mg/kg bw/day <u>Effects:</u> Systemic</p> <p><b>DNEL - General population - Long term - Oral</b> 0.98 mg/kg bw/day <u>Effects:</u> Systemic</p> <p><b>DNEL - General population - Long term - Inhalation</b> 4.15 mg/m³ <u>Effects:</u> Systemic</p> <p><b>DNEL - Workers - Long term - Inhalation</b> 8.3 mg/m³ <u>Effects:</u> Systemic</p> <p><b>DNEL - General population - Long term - Dermal</b> 196 mg/kg bw/day <u>Effects:</u> Systemic</p> <p><b>DNEL - Workers - Long term - Dermal</b> 392 mg/kg bw/day <u>Effects:</u> Systemic</p>
sodium hydroxide	<p><b>DNEL - General population - Long term - Inhalation</b> 1 mg/m³ <u>Effects:</u> Local</p> <p><b>DNEL - Workers - Long term - Inhalation</b> 1 mg/m³ <u>Effects:</u> Local</p>
reaction mass of 5-chloro-2- methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3- one (3:1)	<p><b>DNEL - General population - Long term - Inhalation</b> 0.02 mg/m³ <u>Effects:</u> Local</p> <p><b>DNEL - Workers - Long term - Inhalation</b> 0.02 mg/m³ <u>Effects:</u> Local</p> <p><b>DNEL - General population - Short term - Inhalation</b> 0.04 mg/m³ <u>Effects:</u> Local</p> <p><b>DNEL - Workers - Short term - Inhalation</b> 0.04 mg/m³</p>

	<u>Effects: Local</u>
	<b>DNEL - General population - Long term - Oral</b> 0.09 mg/kg bw/day <u>Effects: Systemic</u>
	<b>DNEL - General population - Short term - Oral</b> 0.11 mg/kg bw/day <u>Effects: Systemic</u>

**PNECs**

Not available.

**8.2 Exposure controls**

<b>Appropriate engineering controls</b>	 user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
<b><u>Individual protection measures</u></b>	
<b>Hygiene measures</b>	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
<b>Eye/face protection</b>	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
<b><u>Skin protection</u></b>	
<b>Hand protection</b>	 Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
<b>Body protection</b>	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
<b>Other skin protection</b>	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
<b>Respiratory protection</b>	Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.
<b>Environmental exposure controls</b>	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

**SECTION 9: Physical and chemical properties**

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.


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

**Appearance**

<b>Physical state</b>	Liquid.
<b>Colour</b>	Colourless.
<b>Odour</b>	Odourless.
<b>Odour threshold</b>	Not available.
<b>pH</b>	Not available.
<b>Melting point/freezing point</b>	Not available.
<b>Initial boiling point and boiling range</b>	Not available.
<b>Flammability (solid, gas)</b>	Not available.
<b>Upper/lower flammability or explosive limits</b>	Not available.
<b>Flash point</b>	[Product does not sustain combustion.]
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Solubility(ies)</b>	

<b>Media</b>	<b>Result</b>
--------------	---------------



	cold water	Easily soluble
	hot water	Easily soluble
Solubility in water	Not available.	
Miscible with water	Yes.	
Partition coefficient: n-octanol/ water	Not available.	
Vapour pressure	Not available.	
	<u>Vapour Pressure at 20°C</u>	
	<u>mm Hg</u>	<u>kPa</u>
	<u>Method</u>	
	<u>mm Hg</u>	<u>kPa</u>
	<u>Method</u>	
 water	17.5	2.3
Evaporation rate	Not available.	
Relative density	Not available.	
Vapour density	Not available.	
Explosive properties	Not available.	
Oxidising properties	Not available.	
<u>Particle characteristics</u>		
Median particle size	Not applicable.	

9.2 Other information

Not available.	
Burning time	Not applicable.
Burning rate	Not applicable.
Solubility in water	Not available.

SECTION 10: Stability and reactivity

10.1 Reactivity	No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability	The product is stable.
10.3 Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to avoid	No specific data.
10.5 Incompatible materials	No specific data.
10.6 Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result
Boric acid	Rat - Oral - LD50 2660 mg/kg
reaction mass of 5-chloro-2- methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3- one (3:1)	Rat - Oral - LD50 53 mg/kg Toxic effects: Behavioral - Somnolence (general depressed activity) Behavioral - Ataxia Lung, Thorax, or Respiration - Respiratory depression
Conclusion/Summary [Product]	Not available.

Acute toxicity estimates

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/ kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/ l)
Boric acid	2660	N/A	N/A	N/A	N/A
reaction mass of 5-chloro-2- methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3- one (3:1)	53	50	N/A	0.5	N/A

Skin corrosion/irritation

Product/ingredient name	Result
-------------------------	--------

<div><div><div>Sodium hydroxide</div></div></div>	<div><div><div>Human - Skin - Severe irritant</div><div>Duration of treatment/exposure: 24 hours</div><div>Amount/concentration applied: 10 pph</div></div></div>
<div><div><div>reaction mass of 5-chloro-2- methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3- one (3:1)</div></div></div>	<div><div><div>Human - Skin - Severe irritant</div><div>Amount/concentration applied: 0.01 %</div></div></div>
<div><div><div>Conclusion/Summary [Product]</div><div>Not available.</div></div></div>	
<div><div><div>Serious eye damage/eye irritation</div><div>Not available.</div></div></div>	
<div><div><div>Conclusion/Summary [Product]</div><div>Not available.</div></div></div>	
<div><div><div>Respiratory corrosion/irritation</div><div>Not available.</div></div></div>	
<div><div><div>Conclusion/Summary [Product]</div><div>Not available.</div></div></div>	
<div><div><div>Respiratory or skin sensitization</div><div>Not available.</div></div></div>	
<div><div><div>Skin</div><div>Conclusion/Summary [Product]</div><div>Not available.</div></div></div>	
<div><div><div>Respiratory</div><div>Conclusion/Summary [Product]</div><div>Not available.</div></div></div>	
<div><div><div>Germ cell mutagenicity</div><div>Not available.</div></div></div>	
<div><div><div>Conclusion/Summary [Product]</div><div>Not available.</div></div></div>	
<div><div><div>Carcinogenicity</div><div>Not available.</div></div></div>	
<div><div><div>Conclusion/Summary [Product]</div><div>No additional remark.</div></div></div>	
<div><div><div>Reproductive toxicity</div><div>Not available.</div></div></div>	
<div><div><div>Conclusion/Summary [Product]</div><div>Not available.</div></div></div>	
<div><div><div>Ingredient name</div><div><div><div>Boric acid</div></div></div></div></div>	<div><div><div>Conclusion/Summary</div><div>Reproductive toxin</div></div></div>
<div><div><div>Specific target organ toxicity (single exposure)</div><div>Not available.</div></div></div>	
<div><div><div>Specific target organ toxicity (repeated exposure)</div><div>Not available.</div></div></div>	
<div><div><div>Aspiration hazard</div><div>Not available.</div></div></div>	
<div><div><div>Information on likely routes of exposure</div><div>Routes of entry anticipated: Oral, Dermal, Inhalation.</div></div></div>	
<div><div><div>Potential acute health effects</div><div>Inhalation</div><div>No known significant effects or critical hazards.</div></div></div>	





Ingestion	No known significant effects or critical hazards.
Skin contact	No known significant effects or critical hazards.
Eye contact	No known significant effects or critical hazards.
<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	
Inhalation	<div>Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations</div>
Ingestion	<div>Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations</div>
Skin contact	<div>Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations</div>
Eye contact	No specific data.
<b>Delayed and immediate effects as well as chronic effects from short and long-term exposure</b>	
<b>Short term exposure</b>	
Potential immediate effects	Not available.
Potential delayed effects	Not available.
<b>Long term exposure</b>	
Potential immediate effects	Not available.
Potential delayed effects	Not available.
<b>Potential chronic health effects</b>	
Not available.	
<b>Conclusion/Summary [Product]</b>	
Not available.	
General	No known significant effects or critical hazards.
Carcinogenicity	No known significant effects or critical hazards.
Mutagenicity	No known significant effects or critical hazards.
Reproductive toxicity	<div>May damage fertility. May damage the unborn child.</div>
Other information	Not available.

SECTION 12: Ecological information

12.1 Toxicity

<b>Product/ingredient name</b>	<b>Result</b>
<div>Boric acid</div>	<div><b>Chronic - NOEC - Fresh water</b> Fish - Rainbow trout,donaldson trout - <i>Oncorhynchus mykiss</i> 2100 µg/l [87 days] Effect: Mortality</div> <div><b>Chronic - NOEC - Fresh water</b> Daphnia - Water flea - <i>Daphnia magna</i> Age: &lt;24 hours 6000 µg/l [21 days] Effect: Reproduction</div> <div><b>Acute - LC50 - Fresh water</b> US EPA Crustaceans - Water flea - <i>Ceriodaphnia dubia</i> Age: &lt;24 hours 45.5 mg/l [48 hours] Effect: Mortality</div> <div><b>Acute - LC50 - Marine water</b> OECD Fish - Red sea bream - <i>Pagrus major</i> Weight: 0.6 g 75 mg/l [96 hours] Effect: Mortality</div>
<div>sodium hydroxide</div>	<div><b>Acute - LC50 - Fresh water</b> Fish - Western mosquitofish - <i>Gambusia affinis</i> - Adult 125 ppm [96 hours]</div>

Effect: Mortality

Conclusion/Summary [Product] Not available.

12.2 Persistence and degradability

Not available.

Conclusion/Summary [Product] Not available.

12.3 Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
1	-1.09	-	Low

12.4 Mobility in soil

Soil/water partition coefficient Not available.

Mobility Not available.

12.5 Results of PBT and vPvB assessment

boric acid	No	No	No	No	No	No	No
sodium hydroxide	No	No	No	No	No	No	No
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	No	N/A	N/A	No	N/A	N/A	N/A

12.6 Other adverse effects No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

Methods of disposal	The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.
Hazardous waste	Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 2008/98/EC.

Packaging

Methods of disposal	The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.
Special precautions	This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-	-
14.3 Transport hazard class(es)	-	-	-	-
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	No.	No.	No.	No.
Additional information	-	-	-	-



<b>14.6 Special precautions for user</b>	<b>Transport within user's premises:</b> always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.
<b>14.7 Transport in bulk according to IMO instruments</b>	Not available.

## SECTION 15: Regulatory information

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

#### UK (GB)/REACH

##### Annex XIV - List of substances subject to authorisation

###### **Annex XIV**

None of the components are listed.

###### Substances of very high concern

Intrinsic property	Ingredient name	Status	Reference number	Date of revision
 Toxic to reproduction	boric acid	Candidate	-	6/18/2010

##### Ozone depleting substances

Not listed.



##### Prior Informed Consent (PIC)

Not listed.

##### Persistent Organic Pollutants

Not listed.

##### Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Product/ingredient name	%	Designation [Usage]
 Detection reagent 1; part of 'ECL direct nucleic acid labelling and detection system; To label 10 µg'	≥90	3 30
boric acid	≤1	30
<b>Labelling</b>	 Restricted to professional users.	

##### Seveso Directive

This product is not controlled under the Seveso Directive.

##### EU regulations

**Industrial emissions (integrated pollution prevention and control) - Air** Not listed

**Industrial emissions (integrated pollution prevention and control) - Water** Not listed

##### International regulations

###### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

###### Montreal Protocol

Not listed.

###### Stockholm Convention on Persistent Organic Pollutants

Not listed.

###### Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

###### UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

##### Inventory list

<b>United States</b>	Not determined.
<b>Canada inventory</b>	Not determined.
<b>China</b>	All components are listed or exempted.






Japan	Japan inventory (CSCL): Not determined. Japan inventory (ISHL): Not determined.
15.2 Chemical safety assessment	This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16: Other information

 Indicates information that has changed from previously issued version.

Abbreviations and acronyms	ATE = Acute Toxicity Estimate GB CLP = UK CLP (EC No 1272/2008) on the Classification, Labelling and Packaging of Substances and Mixtures as amended by (EU Exit) Regulations 2019 No. 720 and amendments DMEL = Derived Minimal Effect Level DNEL = Derived No Effect Level EUH statement = GB CLP-specific Hazard statement N/A = Not available PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration RRN = REACH Registration Number SGG = Segregation Group vPvB = Very Persistent and Very Bioaccumulative
----------------------------	--

Procedure used to derive the classification

Classification		Justification
 Repr. 1B, H360FD		Calculation method
Full text of abbreviated H statements	 H301	Toxic if swallowed.
	H310	Fatal in contact with skin.
	H314	Causes severe skin burns and eye damage.
	H317	May cause an allergic skin reaction.
	H318	Causes serious eye damage.
	H330	Fatal if inhaled.
	H360FD	May damage fertility. May damage the unborn child.
	H400	Very toxic to aquatic life.
	H410	Very toxic to aquatic life with long lasting effects.
Full text of classifications	EUH071	Corrosive to the respiratory tract.
	 Acute Tox. 2	ACUTE TOXICITY - Category 2
	Acute Tox. 3	ACUTE TOXICITY - Category 3
	Aquatic Acute 1	SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
	Aquatic Chronic 1	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
	Eye Dam. 1	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
	Repr. 1B	REPRODUCTIVE TOXICITY - Category 1B
	Skin Corr. 1A	SKIN CORROSION/IRRITATION - Category 1A
	Skin Corr. 1C	SKIN CORROSION/IRRITATION - Category 1C
Date of printing	Skin Sens. 1A	SKIN SENSITISATION - Category 1A
	17 February 2026	
	17 February 2026	
Date of issue/ Date of revision	13 May 2024	
Date of previous issue	7.02	
Version		

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

