

**Section 1. Identification of the material and the supplier**

Product: **Aperlan Poka-Yoke Agent B**  
 Product Code: 41010057  
 Product Use: Additive. Restricted to professional users.

**New Zealand Distributor: Getinge Australia (New Zealand Branch)**  
 Address: 600 Great South Road  
 Building B, Level 2,  
 Ellerslie, Auckland, 1051  
 New Zealand  
 Telephone: +64 9 272 9039  
**Emergency Telephone: +64 9 272 9039 or 0800 764 766 (National Poison Centre)**

Date of SDS Preparation: 26 April 2023

**Section 2. Hazards Identification**

This substance is hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

**EPA Approval Code: Additives, Process Chemicals and Raw Materials (Corrosive) Group Standard 2020 – HSR002491**

**Pictograms**



Signal Word: **DANGER**

GHS Classification and Category	Hazard Code	Hazard Statement
Corrosive to metals Cat. 1	H290	May be corrosive to metals.
Skin corrosion Cat. 1B	H314	Causes severe skin burns and eye damage.
Serious eye damage Cat. 1	H318	Causes serious eye damage.
Hazardous to the aquatic environment chronic Cat. 3	H412	Harmful to aquatic life with long lasting effects.

Prevention Code	Prevention Statement
P102	Keep out of reach of children.
P103	Read carefully and follow all instructions.
P234	Keep only in original packaging.
P260	Do not breathe fumes, gas, mist, vapours or spray.
P264	Wash hands thoroughly after handling.
P273	Avoid release to the environment.

P280	Wear protective clothing as detailed in Section 8.
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Response Code	Response Statement
P101	If medical advice is needed, have product container or label at hand.
P310	Immediately call a POISON CENTER or doctor/physician.
P363	Wash contaminated clothing before reuse.
P390	Absorb spillage to prevent material damage.
P301 + P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Storage Code	Storage Statement
P405	Store locked up.
P406	Store in corrosive resistant container with a resistant inner liner.

Disposal Code	Disposal Statement
P501	Dispose of according to Local Regulations or Authorities

### Section 3. Composition / Information on Ingredients

Ingredients	Wt%	CAS NUMBER.
Potassium hydroxide	<10	1310-58-3
Benzotriazole	<5	95-14-7

### Section 4. First Aid Measures

Routes of Exposure:

If in Eyes	Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
If on Skin	Wash with plenty of soap and water. Take off contaminated clothing and wash before re-use. Seek immediate medical attention.
If Swallowed	Rinse mouth. Do NOT induce vomiting. Never give anything to the mouth of an unconscious person. Give small amounts of water to drink. If vomiting occurs, place victim face downwards, with the head turned to the side and lower than the hips to prevent vomit entering the lungs. Call a POISON CENTER or doctor/physician if you feel unwell.
If Inhaled	Remove person to fresh air. Remove contaminated clothing and loosen remaining clothing. Allow person to assume most comfortable position and keep warm. Keep at rest until fully recovered. Get medical advice if breathing becomes difficult.

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

Symptoms:

<b>Ingestion:</b>	Not applicable.
<b>Inhalation:</b>	Not applicable.
<b>Skin:</b>	Causes severe skin burns.
<b>Eye:</b>	Causes serious eye damage.

**Notes to Doctor:** Treat symptomatically. For specialist advice physicians should contact the Poisons Information Service.

## Section 5. Fire Fighting Measures

<b>Hazard Type</b>	Non Flammable
<b>Hazards from combustion products</b>	Gives off hydrogen by reaction with metals. Risk of explosion. No hazardous combustion products are known
<b>Suitable Extinguishing media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. The product itself does not burn.
<b>Precautions for firefighters and special protective clothing</b>	In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment. Contaminated surfaces will be extremely slippery.
<b>HAZCHEM CODE</b>	<b>2R</b>

## Section 6. Accidental Release Measures

Wear protective equipment as detailed in Section 8. Clear area of any unprotected personnel. Ensure adequate ventilation. Avoid contact with skin and eyes. Increased risk of slipping in the presence of leaked / spilled product.

Avoid subsoil penetration. Do not flush into surface water or sanitary sewer system.

Wipe up with absorbent material (e.g. cloth, fleece). Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Clean contaminated surface thoroughly. Flush with water. Dispose of according to Local Regulations detailed in Section 13.

## Section 7. Handling and Storage

After opening, use within: 2 months.

### Precautions for Handling:

- Read carefully and follow all instructions.
- Keep only in original packaging.
- Do not breathe fumes, gas, mist, vapours or spray.
- Wash hands thoroughly after handling.
- Avoid release to the environment.
- Wear protective clothing as detailed in Section 8.
- Handle and open container with care.
- Never return unused material to storage receptacle.
- Take off all contaminated clothing immediately.
- Keep away from food and drink.

### Precautions for Storage:

- Keep out of reach of children.
- Store locked up.
- Store in corrosive resistant container with a resistant inner liner.
- Store at room temperature in the original container.
- Recommended storage temperature: 5 - 30°C.
- Do not store near acids.

## Section 8 Exposure Controls / Personal Protection

### WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

**TWA**

**STEL**

Product Name: Aperlan Poka-Yoke Agent B  
Date of SDS: 26 April 2023

SDS Prepared by: Technical Compliance Consultants (NZ) Ltd  
Tel: 64 9 475 5240 [www.techcomp.co.nz](http://www.techcomp.co.nz)

**Substance**ppm mg/m<sup>3</sup>ppm mg/m<sup>3</sup>

Potassium hydroxide [1310-58-3]

Ceiling 2

Workplace Exposure Standard – Time Weighted Average (WES-TWA). The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure. Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). The 15-minute average exposure standard. Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply. Workplace Exposure Standards and Biological Exposure Indices APRIL 2022 13<sup>TH</sup> EDITION.

**Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006****Potassium hydroxide**

End Use	Exposure routes	Potential health effects	Value
Workers	Inhalation	Long-term local effects	1 mg/m <sup>3</sup>

**Benzotriazole**

End Use	Exposure routes	Potential health effects	Value
Workers	Skin contact	Long-term systemic effects	1.08 mg/kg
Workers	Inhalation	Long-term systemic effects	19 mg/m <sup>3</sup>

**Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006****Benzotriazole**

Environmental Compartment	Value
Fresh water	0.0194 mg/l
Marine water	0.0194 mg/l
Intermittent use/release	0.158 mg/l
Effects on waste water treatment plants	39.4 mg/kg
Fresh water sediment	0.00375 mg/kg
Marine sediment	0.00375 mg/kg
Soil	0.003 mg/kg

**Engineering Controls**

Ensure adequate ventilation is available. Ensure that eyewash stations and safety showers are close to the workstation location.

**Personal Protection Equipment:**

<b>Eyes</b>	Safety glasses with side-shields conforming to EN166 Face-shield
<b>Hands</b>	The selected protective gloves have to satisfy the specifications the standard EN 374 derived from it. Remarks: Splash protection: disposable nitrile rubber gloves e.g. Dermatril (layer thickness: 0,11 mm) Prolonged contact: Nitrile rubber gloves e.g. Camatril (>480 Min., layer thickness: 0,40 mm) or butyl rubber gloves e.g. Butoject (>480 Min., layer thickness: 0,70 mm)
<b>Skin</b>	Choose body protection according to the amount and concentration of the dangerous substance at the work place. Wear as appropriate: ·Chemical resistant apron ·Boots
<b>Respiratory</b>	Not required.

<b>Thermal Hazards</b>	Product contains small amounts of methyl alcohol (methanol) which is flammable (The mixture is not flammable). Handle and store product away from sources of heat and ignition (sparks, open flames, etc.).
<b>Hygiene Measures</b>	Wash hands before breaks and after work. Avoid contact with skin and eyes. When using do not eat or drink.

## Section 9 Physical and Chemical Properties

<b>Appearance</b>	Liquid
<b>Colour</b>	Light yellow
<b>Odour</b>	Odourless
<b>Odour Threshold</b>	Not available
<b>pH @ 20°C</b>	>13
<b>Boiling Point</b>	Approx 100°C
<b>Melting Point</b>	<-5°C
<b>Freezing Point</b>	Not available
<b>Flash Point</b>	Not available
<b>Flammability</b>	Not available
<b>Upper and Lower Explosive Limits</b>	Not available
<b>Vapour Pressure</b>	Not available
<b>Vapour Density</b>	Not available
<b>Relative Density @ 20°C</b>	1.1 g/cm <sup>3</sup>
<b>Water Solubility</b>	In all proportions (20 °C)
<b>Partition Coefficient:</b>	Not available
<b>Auto-ignition Temperature</b>	Not available
<b>Self-Accelerating decomposition temperature (SADT):</b>	Not available
<b>Kinematic Viscosity</b>	Not available
<b>Particle Characteristics</b>	Not applicable

## Section 10. Stability and Reactivity

<b>Stability of Substance</b>	This product is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Gives off hydrogen by reaction with metals. Reaction with acids.
<b>Conditions to Avoid</b>	Protect from frost, heat and sunlight.
<b>Incompatible Materials</b>	Possible incompatibility with alkali sensitive materials. Acids.
<b>Hazardous Decomposition Products</b>	None

## Section 11 Toxicological Information

### Acute Effects:

<b>Swallowed</b>	Not applicable.
<b>Dermal</b>	Not applicable.
<b>Inhalation</b>	Not applicable.
<b>Eye</b>	Causes serious eye damage.
<b>Skin</b>	Causes severe skin burns.

### Chronic Effects:

<b>Carcinogenicity</b>	Not applicable.
<b>Reproductive Toxicity</b>	Not applicable.

<b>Germ Cell Mutagenicity</b>	Not applicable.
<b>Aspiration</b>	Not applicable.
<b>STOT/SE</b>	Not applicable.
<b>STOT/RE</b>	Not applicable.

### Acute Toxicity:

Chemical Name	Oral – LD50	Dermal – LD50	Inhalation – LC50
Product (Aperlan Poka-Yoke Agent B)	>5000 mg/kg	>15000mg/kg	>5 mg/l
Potassium hydroxide	365 mg/kg (rat) Method: OECD Test Guideline 425	-	-
Benzotriazole	560 mg/kg (Rat) Method: OECD Test Guideline 423	>2000 mg/kg (rabbit)	-

## Section 12. Ecotoxicological Information

Chronic aquatic toxicity: Harmful to aquatic life with long lasting effects.

### Toxicity

#### Components

##### Potassium hydroxide

Biodegradability: Remarks: The methods for determining biodegradability are not applicable to inorganic substances.

##### Benzotriazole

Biodegradability: Result: Not rapidly biodegradable  
Exposure time: 28 d  
Method: OECD Test Guideline 301D

### Persistence and degradability

#### Components

##### Potassium hydroxide

Bioaccumulation: Remarks: Does not bioaccumulate

##### Benzotriazole

Bioaccumulation: Bioconcentration factor (BCF): 4.14  
Remarks: Accumulation in aquatic organisms is unlikely.

Partition coefficient: noctanol/water: Pow: 1.34 (22.7 °C)  
Remarks: Due to the distribution coefficient noctanol/water, accumulation in organisms is possible.

### Bioaccumulative potential

#### Components

##### Potassium hydroxide

Bioaccumulation: Remarks: Does not bioaccumulate

##### Benzotriazole

Bioaccumulation: Bioconcentration factor (BCF): 4.14  
Remarks: Accumulation in aquatic organisms is unlikely.

Partition coefficient: noctanol/water: Pow: 1.34 (22.7 °C)

**Mobility in soil****Components****Potassium hydroxide**

Mobility:	Remarks: Mobile in soils
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**Benzotriazole**

Mobility:	Remarks: No data available.
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**Results of PBT and vPvB assessment****Product**

Assessment:	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1 % or higher.
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Do not allow to enter waterways.

**Section 13. Disposal Considerations****Disposal Method:**

Spent media that has removed toxic chemicals should be examined for specific hazards. Spilled product may be recovered for use if it has not come in contact with liquids or been exposed to significant amounts of gaseous contaminants. Dispose of according to Local Regulations.

Ensure any container holding waste product or contaminated spill media is labelled "Hazardous Waste – Corrosive" and that the label also has the Corrosive Pictogram, waste type identifier, and the business name, address, and phone number.

**Disposal methods to avoid:** Do not allow to enter waterways.

**Section 14 Transport Information**

**This product is classified as a Dangerous Good for transport in NZ ; NZS 5433:2020 and SNZ HB 5433:2021**

**Road, Rail, Sea and Air Transport**

<b>UN No</b>	1814
<b>Class - Primary</b>	8
<b>Packing Group</b>	II
<b>Proper Shipping Name</b>	POTASSIUM HYDROXIDE, SOLUTION
<b>Marine Pollutant</b>	No
<b>Special Provisions</b>	If the product's individual container is below 1L, it can be transported as a non-DG as long as the product packaging is still labelled as per DG requirements and the driver is given safety information in accordance with Chapter 3.4 of the UNRTDG.

**Section 15 Regulatory Information****EPA Approval No:**

Product Name: Aperlan Poka-Yoke Agent B  
Date of SDS: 26 April 2023

SDS Prepared by: Technical Compliance Consultants (NZ) Ltd  
Tel: 64 9 475 5240 www.techcomp.co.nz

Trigger quantities for this substance:

<b>HSW (HS) Regulations 2017 and EPA Notices</b>	<b>Trigger Quantity</b>
Certified Handler	Not required
Location Certificate	250L
Tracking Trigger Quantities	Not required
Signage Trigger Quantities	250L
Emergency Response Plan	1000L
Secondary Containment	1000L
Restriction of Use	Only use for the intended purpose.

## **Section 16 Other Information**

### **Glossary**

EC <sub>50</sub>	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
HSW	Health and Safety at Work.
LC <sub>50</sub>	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD <sub>50</sub>	Lethal dose to kill 50% of test animals/organisms.
LEL	Lower explosive level.
OSHA	American Occupational Safety and Health Administration.
TEL	Tolerable Exposure Limit.
TLV	Threshold Limit Value-an exposure limit set by responsible authority.
UEL	Upper Explosive Level
WES	Workplace Exposure Limit

### **References:**

1. EPA Hazardous Substances (Safety Data Sheets) Notice 2017
2. Workplace Exposure Standards and Biological Exposure Indices April 2022 edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2020
5. HSW (Hazardous Substances) Regulations 2017

### **Disclaimer**

This document has been prepared by TCC (NZ) Ltd and serves as the suppliers Safety Data Sheet ('SDS'). It is based on information concerning the product which has been provided to TCC (NZ) Ltd or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer. While TCC (NZ) have taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, TCC (NZ) Ltd accept no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS

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Please contact the New Zealand distributor, if further information is required.

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