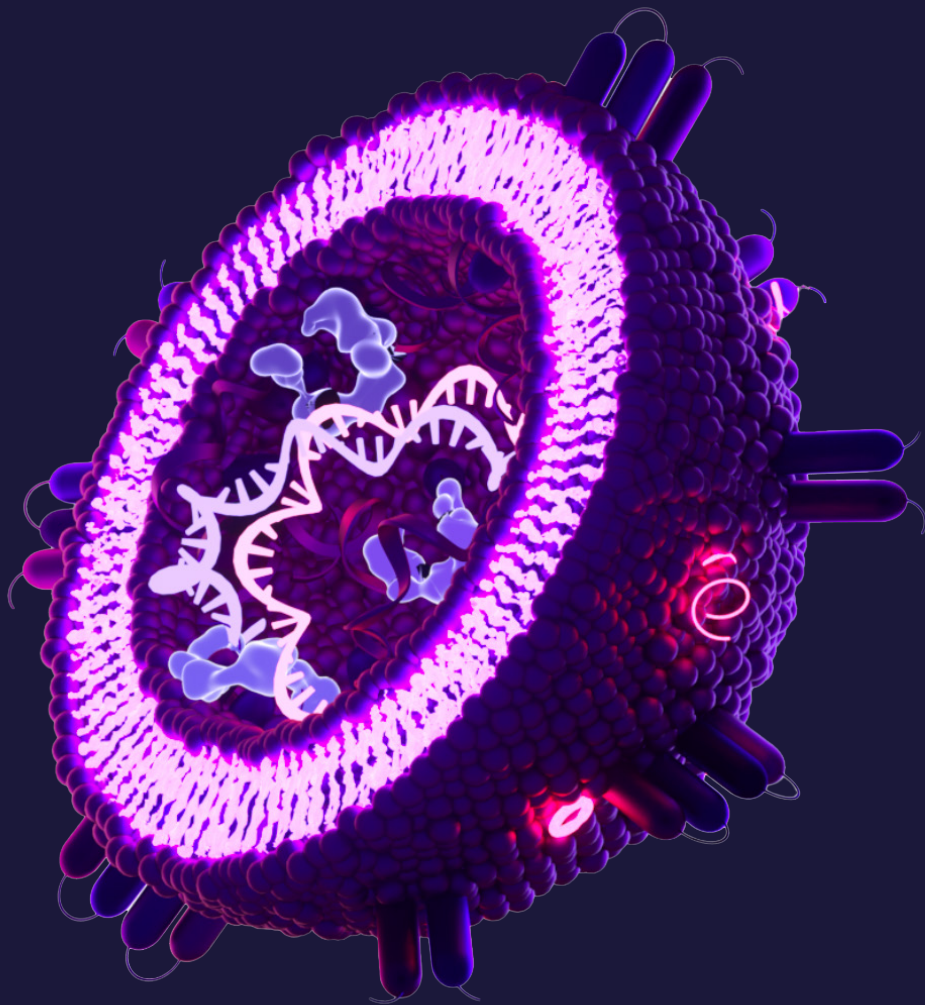


qEV COLUMNS

SAFETY DATA SHEET



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1 / IDENTIFICATION OF THE MIXTURE AND OF THE COMPANY

1.1 Product Identifiers

Product name qEV Column

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Identified uses Academic and industry R&D

1.3 Details of the Supplier of the Safety Data Sheet

Company Izon Science Limited

Address 2 Show Place PO Box 9292
Addington Tower Junction
Christchurch Christchurch
8024 8149
New Zealand New Zealand

Telephone +64 3 3 574270

Email info@izon.com

Website www.izon.com

1.4 Emergency Telephone Number

New Zealand: NZ National Poisons Centre 0800 764 766 (0800 POISON)

Overseas: +64 3 479 7248

2 / HAZARDS IDENTIFICATION

2.1 Classification of the Mixture

Classification according to GHS and EC Regulation 1272/2008 (CLP)

Acute Toxicity category 4. H302 Harmful if swallowed.

Skin Sens. 1.; H317: May cause an allergic skin reaction.

The only hazards identified with this product are those associated with ProClin 200®, which is present at a very low concentration (< 0.1%), or Sodium Azide, which is present at a very low concentration (< 0.1% w/v).

2.2 Label Elements

Labeling according to GHS, EC Regulation 1272/2009 (CLP) and 29 CFR 1910.1200 (OSHA)

Pictogram



Signal word Warning

Hazard Statement(s)

H302 Harmful if swallowed

H317 May cause an allergic skin reaction

Precautionary Statement(s): Prevention

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P262 Do not get in eyes, on skin, or on clothing.

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P272 Contaminated work clothing should not be allowed out of the workplace.

P280 Wear protective gloves/ protective clothing.

Precautionary Statement(s): Response

P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P302 + P352	IF ON SKIN: Wash with plenty of water.
P312	Call a POISON CENTER/doctor if you feel unwell.
P322	Specific measures (see supplemental first aid instructions).
P362 + P364	Take off contaminated clothing and wash before reuse.

Disposal

P501	Dispose of contents/ container to an approved waste disposal plant.
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2.3 Other Hazards

None

3 / COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Mixture

Table 1: Information on ingredients

COMPONENT	IDENTIFICATION	CLASSIFICATION OF PURE SUBSTANCE	CONCENTRATION (%)
ProClin 200®: Mixture of active ingredients: 5-Chloro-2-methyl-4-isothiazolin-3-one and 2-Methyl-2H -isothiazol-3-one-(3:1). (Concentration ≥1 - < 2.5%) and, Magnesium nitrate (Concentration ≥ 1.4 - ≤ 2.7%) and, Copper dinitrate (Concentration ≥ 0.1 - <0.25%)	CAS No. 55965-84-9 EC-No. Index No. -613-167-00-5 CAS No. 10377-60-3 EC-No. 233-826-7 Index No. - CAS No. 3251-23-8 EC-No. 221-838-5 Index No. -	Acute Tox. 3; Acute Tox. 2; Skin Corr./Irrit. 1C; Eye Dam./Irrit. 1; Skin Sens. 1A; Aquatic Acute 1; Aquatic Chronic 1; H301, H330, H310, H314, H318, H317, H400, H410 Concentration limits: ≥ 0.6 %: Skin Corr. 1B, H314; 0.06 - < 0.6 %: Skin Irrit. 2, H315; 0.06 - < 0.6 %: Eye Irrit. 2, H319; ≥ 0.0015 %: Skin Sens. 1A, H317; M-Factor - Aquatic Acute: 100 - Aquatic Chronic: 100 Ox. Sol. 2; Skin Corr./Irrit. 1B; Eye Dam./Irrit. 1; Aquatic Acute 1; Aquatic Chronic 1; H272, H314, H318, H400, H410 M-Factor - Aquatic Acute: 10 M-Factor - Aquatic Chronic: 1	< 0.1%
OR Sodium Azide	CAS No. 26628-22-8 EC-No. 247-852-1 Index No. 011-004-00-7	Acute Tox. 2, Aquatic Acute 1, Aquatic Chronic 1; H300, H400, H410	< 0.1%
Filtration Matrix (Proprietary)		Not Hazardous	50 - 70
Water		Not Hazardous	30 - 50
Phosphate Buffered Saline (PBS)		Not Hazardous	Remainder

4 / FIRST AID MEASURES

4.1 Description of First Aid Measures

General Advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If Inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In Case of Skin Contact

Wash off with soap and generous amounts of water.

In Case of Eye Contact

Flush eyes with water as a precaution.

If Swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most Important Symptoms and Effects, Both Acute and Delayed

If swallowed may produce nausea, headaches and vomiting.

Prolonged skin contact may cause redness and irritation.

Eye contact may cause severe irritation.

4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed

There are no additional recommendations.

5 / FIREFIGHTING MEASURES

5.1 Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media: None.

5.2 Special Hazards Arising From the Substance or Mixture

None

5.3 Advice for Firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further Information

No data available.

6 / ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment and Emergency Procedures

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

For personal protection see [Section 8](#).

6.2 Environmental Precautions

Prevent further leakage or spillage if safe to do so. Discharge into the environment must be avoided.

6.3 Methods and Materials for Containment and Cleaning Up

Soak up with absorbent inert material and dispose of and keep in suitable containers for disposal.

6.4 Reference to Other Sections

For disposal see [Section 13](#).

7 / HANDLING AND STORAGE

7.1 Precautions for Safe Handling

Wash hands and other exposed areas with soft soap and water before eating, drinking, smoking and leaving work.

7.2 Conditions for Safe Storage, Including Any Incompatibilities.

Keep container tightly closed in a dry and well-ventilated place.

7.3 Specific End Use(s)

Apart from the uses mentioned in [Section 1.2](#) no other specific uses are stipulated.

8 / EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters

Table 2: International Limit Values for Sodium Azide and ProClin 200®

COMPONENT	COUNTRY	LIMIT VALUE - EIGHT HOURS	LIMIT VALUE - SHORT TERM
Sodium Azide CAS No. 26628-22-8	New Zealand/Australia	Ceiling 0.11 ppm (0.29 mg/m ³)	
	European Union	0.1 mg/m ³	0.3 mg/m ³
	United Kingdom	0.1 mg/m ³	0.3 mg/m ³
	United States	Ceiling: 0.1 ppm as HN ₃ (skin), 0.3 mg/m ³ as NaN ₃ (skin)	
ProClin 200® containing Copper dinitrate CAS No. 3251-23-8	New Zealand/Australia	0.01 mg/m ³ TWA - WES	
	United States	1 mg/m ³ TWA - PEL	
	United Kingdom	1 mg/m ³ TWA Dusts and Mists	

8.2 Exposure Controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

Personal Protective Equipment

- ▶ Eye/face protection: Chemical safety glasses or goggles.
- ▶ Skin protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
- ▶ Body protection: Protective work clothing.
- ▶ Respiratory protection: None required if used in a laboratory with an adequate air exchange HVAC.

9 / PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Viscous, opaque and clear liquid
Odour	Odourless
pH	7.4
Vapour pressure	No data
Viscosity	No data
Boiling point	No data
Volatile materials	No data
Freezing / melting point	No data
Solubility	Soluble in water
Specific gravity / density	1.22
Flash point	Non-flammable
Danger of explosion	No data
Auto-ignition temperature	No data
Upper & lower flammable limits	No data
Corrosiveness	Non-corrosive

10 / STABILITY AND REACTIVITY

10.1 Reactivity

No data available.

10.2 Chemical Stability

Stable under recommended storage conditions.

10.3 Possibility of Hazardous Reactions

No data available.

10.4 Conditions to Avoid

For qEV columns containing Sodium Azide do not allow solutions to concentrate. Avoid acid pH conditions.

10.5 Incompatible Materials

For qEV columns containing Sodium Azide avoid contact with metals.

10.6 Hazardous Decomposition Products

None known.

11 / TOXICOLOGICAL INFORMATION

Summary

IF SWALLOWED: large quantities may cause vomiting, diarrhoea, dehydration and congestion. Hypertonic salts (e.g., this mixture) can cause inflammation of the gastrointestinal tract.

Table 3: Supporting Data

ACUTE	Oral	Using LD50s for ingredients, the calculated LD50 (oral, rat) for the mixture is >5,000 mg/kg
	Inhaled	This mixture may cause irritation No data available
	Eye	This mixture may cause irritation No data available
	Skin	This mixture may cause irritation No data available
CHRONIC	Sensitisation	May cause an allergic skin reaction No data available
	Mutagenicity	No ingredient present at concentrations > 0.1% is considered a mutagen
	Carcinogenicity	Contains no ingredients above reportable quantities listed as a carcinogen
	Reproductive / developmental systemic	No data available
	Aggravation of existing conditions	None known No data available

12 / ECOLOGICAL INFORMATION

12.1 Toxicity

The environmental impact of this product has not been fully investigated. Contains a substance which is harmful to the aquatic environment with long lasting effects at very low concentrations.

12.2 Persistence and Degradability

No data available.

12.3 Bioaccumulative Potential

No data available.

12.4 Mobility in Soil

No data available.

12.5 Results of PBT and vPvB Assessment

Not applicable.

Other Adverse Effects

In respect to ProClin 200®:

Components:

Mixture of 5-Chloro-2-methyl-4-isothiazolin-3-one and 2-Methyl-2H -isothiazol-3-one (3:1):

Toxicity to fish flow-through test LC50 - *Oncorhynchus mykiss* (rainbow trout) - 0.19 mg/L - 96 h (US-EPA)

Toxicity to daphnia and other aquatic invertebrates flow-through test LC50 - *Daphnia magna* (Water flea) - 0.18 mg/L - 48 h (US-EPA)

Toxicity to bacteria static test EC50 - activated sludge - 4.5 mg/L - 3 h (OECD Test Guideline 209)

Copper dinitrate:

Toxicity to fish flow-through test LC50 - *Pimephales promelas* (fathead minnow) - 0.19 mg/L - 96 h Remarks: (ECHA)

In respect to Sodium Azide: it is very toxic to aquatic life with long-lasting effects.

13 / DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods

Product

Dispose of waste in accordance to applicable national, regional, or local regulations.

Contaminated Packaging

Dispose of as unused product.

14 / TRANSPORT INFORMATION

14.1 UN Number

ADR/RID: -

IMDG: -

IATA: -

14.2 UN Proper Shipping Name

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

14.3 Transport Hazard Class(es)

ADR/RID: -

IATA: -

14.4 Packaging Group

ADR/RID: -

IMDG: -

IATA: -

14.5 Environmental Hazards

ADR/RID: No

IMDG: Marine Pollutant: No

IATA: No

14.6 Special Precautions for Transportation

None.

15 / REGULATORY INFORMATION

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

HSNO Group Standard Approval: not required.

Tracking Required: not required.

Approved Handler Certification: not required.

This product does not contain substances subject to authorization (Regulation (EC) No. 1907/2006 (REACH), Annex XIV).

This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII).

Notification Status

AICS:	On the inventory, or in compliance with the inventory
DSL/NDSL:	On the inventory, or in compliance with the inventory
ENCS/ISHL:	On the inventory, or in compliance with the inventory
EINECS/ELINCS:	On the inventory, or in compliance with the inventory
KECI:	On the inventory, or in compliance with the inventory
NZIoC:	On the inventory, or in compliance with the inventory
PICCS:	On the inventory, or in compliance with the inventory
TSCA:	On the inventory, or in compliance with the inventory

AICS:	Australian Inventory of Chemical Substances
DSL/NDSL:	Canadian Domestic Substances List/Non-Domestic Substances List
ENCS/ISHL:	Japan Existing and New Chemical Substances
EINECS/ELINCS:	European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
KECL:	Korean Existing and Evaluated Chemical Substances
NZIoC:	New Zealand Inventory of Chemicals
PICCS:	Philippines Inventory of Chemicals and Chemical Substances
TSCA:	United States Inventory of Chemical Substances

In addition to the above referenced country chemical inventory control, the reader should refer to any other relevant laws and regulations that identify specific occupational health and safety and environmental requirements in their country.

15.2 Chemical Safety Assessment

Not applicable.

16 / OTHER INFORMATION

Further Information

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Izon Science Limited shall not be held liable for any damage resulting from handling or from contact with the above product. See www.izon.com for additional terms and conditions of sale.

The reader should refer to their individual country's relevant laws and regulations to identify any variant requirements to this (EC) No 1272/2008 [CLP] compliant SDS.

Full Text of H-Statements Referred to Under Section 3

H272	May intensify fire; oxidizer.
H301	Toxic if swallowed.
H303	May be harmful if swallowed.
H310	Fatal in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

