qEV Size Exclusion Columns

Safety Data Sheet

SECTION 1: Identification of the mixture and of the company

1.1 Product identifiers

Product name : qEV Size Exclusion Column

Types : qEVoriginal, qEVsingle, qEV2, qEV10 and qEV100

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

Identified uses : R&D, Industrial & for Professional use only.

1.3 Details of the supplier of the safety data sheet

Company	IZON Science Ltd	
Adress	8c Homersham Place Burnside Christchurch 8053 New Zealand	PO Box 39168 Burnside Christchurch 8053 New Zealand

Telephone : +64 3 357 4270
Email : info@izon.com
Website : www.izon.com

Emergency Phone # : CHEMTREC Int'l: +64 9 801 0034

SECTION 2: Hazards identification

2.1 Classification of the mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

2.1.1 *Sodium Azide:*

Acute toxicity, Oral (Category 2), H300
Acute toxicity, Dermal (Category 1), H310
Specific target organ toxicity – repeated exposure, Oral (Category 2), Brain, H373
Acute aquatic toxicity (Category 1), H400
Chronic aquatic toxicity (Category 1), H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.1.2 *Phosphate Buffered Saline (PBS):*

Physical, Health and Environmental Hazards: Not hazardous

2.1.3 *Filtration Matrix (Proprietary):*

Physical, Health and Environmental Hazards: Not hazardous

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008 [CLP]

2.2.1 *Sodium Azide:*

Pictogram

Signal word	Danger
Hazard statement(s)	
H300 + H310	Fatal if swallowed or in contact with skin
H373	May cause damage to organs (Brain) through prolonged or repeated exposure if swallowed.
H410	Very toxic to aquatic life with long lasting effects.
Precautionary statement(s)	
Prevention	
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.
P273	Avoid release to the environment.
P280	Wear protective gloves/ protective clothing.
Response	
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P302 + P350	IF ON SKIN: Gently wash with plenty of soap and water.
P310	Immediately call a POISON CENTER/doctor.
P322	Specific measures (see supplemental first aid instructions on this label).
P330	Rinse mouth.
P361	Remove/Take off immediately all contaminated clothing.
P363	Wash contaminated clothing before reuse.
P391	Collect spillage.
Storage	
P405	Store locked up.
Disposal	
P501	Dispose of contents/ container to an approved waste disposal plant.
Supplemental Hazard information (EU)	
EUH032	Contact with acids liberates very toxic gas.

2.2.2 *Phosphate Buffered Saline (PBS):*

Hazard Pictograms, Single Word, Hazard Statements, EU Specific Hazard Statements and Precautionary Statements: Not applicable

2.2.3 *Filtration Matrix (Proprietary):*

Hazard Pictograms, Single Word, Hazard Statements, EU Specific Hazard Statements and Precautionary Statements: Not applicable

2.3 Other hazards

This mixture does not contain any substances that are assessed to be a persistent, bio accumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
Sodium Azide may react with lead and copper plumbing to form highly explosive metal azides. Rapidly absorbed through skin.

SECTION 3: Composition/information on ingredients

3.1 Mixture

Hazardous ingredient according to Regulation (EC) No 1272/2008 [CLP}

Component		Classification	Concentration (%)
Sodium Azide			
CAS-No.	26628-22-8	Acute Tox. 2; Acute Tox. 1;	< 0.1
EC-No.	247-852-1	STOT RE 2; Aquatic Acute 1;	
Index-No.	011-004-00-7	Aquatic Chronic 1; H300, H310, H373, H400, H410	
		M-Factor – Aquatic Acute: 1	

For the full text of the H-Statements mentioned in this Section, see Section 16.

Non Hazardous Ingredients

Component (%)	Classification	Concentration
Phosphate Buffered Saline (PBS)	Not Hazardous	30 -60
Filtration Matrix (Proprietary)	Not Hazardous	*1 - 10*
Water	Not Hazardous	Balance

SECTION 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 plenty of water. Take victim immediately to hospital. Consult a physician.

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
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed No data available

SECTION 5: Firefighting Measures

5.1 Extinguishing media

Suitable extinguishing media
Dry powder

5.2 Special hazards arising from the substance or mixture
Sodium oxides

5.3 Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information
No data available

SECTION 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures
Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
For personal protection see section 8.

6.2 Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up
Pick up and arrange disposal without creating dust. Sweep up and shovel. Do not flush with water. Keep in
suitable, closed containers for disposal.

6.4 Reference to other sections
For disposal see section 13.

SECTION 7: Handling and Storage

7.1 Precautions for safe handling
Avoid contact with skin and eyes. Avoid formation of dust and aerosols.
Provide appropriate exhaust ventilation at places where dust is formed.
For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities
Store in cool place. Keep container tightly closed in a dry and well-ventilated place.
Never allow product to get in contact with water during storage. Do not store near acids.

7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure Controls/Personal Protection

8.1 Control parameters

International Limit Values for Sodium Azide (as NaN3), CAS number 26628-22-8

Country	Limit Value – Eight hours	Limit value - short term
New Zealand/Australia		Ceiling 0.11ppm (0.29mg/m^3)
European Union	0.1mg/m^3	0.3mg/m3
United Kingdom	0.1mg/m^3	0.3mg/m^3
United States	Ceiling: 0.1ppm as HN_3 (skin), 0.3 mg/m^3 as NaN_3 (skin)	

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8.2 Exposure controls

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

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under

appropriate government standards such as NIOSH (US) or EN 166(EU).

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

Complete suit protecting against chemicals, The type of protective equipment must be selected

according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into

the environment must be avoided.

SECTION 9: Physical and Chemical Properties

Appearance	white 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

SECTION 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

An explosion occurred when a mixture of sodium azide, methylene chloride, dimethyl sulfoxide, and sulfuric acid were being concentrated on a rotary evaporator.

10.5 Incompatible materials

Halogenated hydrocarbon, Metals, Acids, Acid chlorides, Hydrazine, Dimethyl sulfate, Inorganic acid chlorides

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Sodium oxides

Other decomposition products - No data available

SECTION 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.
Supporting Data

Acute	**Oral**	Using LD_{50}'s for ingredients, the calculated LD_{50} (oral, rat) for the mixture is >5,000 mg/kg
	Dermal	No evidence of dermal toxicity
	Inhaled	No evidence of inhalation toxicity
	Eye	The mixture is not considered to be an eye irritant
	Skin	The mixture is not considered to be a skin irritant
Chronic	**Sensitisation**	No ingredient present at concentrations > 0.1% is considered a sensitizer
	Mutagenicity	No ingredient present at concentrations > 0.1% is considered a mutagen
	Carcinogenicity	No ingredient present at concentrations > 0.1% is considered a carcinogen. No component is listed by IARC as a probable, possible or confirmed carcinogen
	Reproductive / Developmental Systemic	No ingredient present at concentrations > 0.1% is considered a reproductive or developmental toxicant or have any effects on or via lactation. No ingredient present at concentrations > 1% is considered a target organ toxicant
	Aggravation of existing conditions	None known

SECTION 12: Ecological Information

*Sodium Azide Component***:**

12.1 Toxicity

Toxicity to fish	mortality LC50 – Pimephales promelas (fathead minnow) – 5,46 mg/l – 96 h (OECD Test Guideline 203)
Toxicity to algae	static test EC50 – Pseudokirchneriella subcapitata – 0,35 mg/l – 96 h (OECD Test Guideline 201)

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
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.

12.6 Other adverse effects
Very toxic to aquatic life with long lasting effects.

SECTION 13: Disposal Considerations

13.1 Waste treatment methods

Product
Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging
Dispose of as unused product.

SECTION 14: Transport Information

14.1 UN number
ADR/RID: 1687 IMDG: 1687 IATA: 1687

14.2 UN proper shipping name
ADR/RID: Mixture contains Sodium Azide
IMDG: " "
IATA: " "

14.3 Transport hazard class(es)
ADR/RID: 6.1 IMDG: 6.1 IATA: 6.1

14.4 Packaging group
ADR/RID: II IMDG: II IATA: II

14.5 Environmental hazards
ADR/RID: yes IMDG Marine pollutant: yes IATA: no

14.6 Special precautions for user
No data available

SECTION 15: Regulatory Information

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

This safety datasheet complies with the requirements of Regulation (EC) No. 453/2010.

National regulatory information

Notification status

AICS:	On the inventory, or in compliance with the inventory
DSL:	On the inventory, or in compliance with the inventory
ENCS:	On the inventory, or in compliance with the inventory
IECSC:	On the inventory, or in compliance with the inventory
ISHL:	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

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

SECTION 16: Other Information

Full text of H-Statements referred to under sections 2 and 3.

EUH032	Contact with acids liberates very toxic gas.
H300	Fatal if swallowed.
H300 + H310	Fatal if swallowed or in contact with skin
H310	Fatal in contact with skin.
H373	May cause damage to organs through prolonged or repeated exposure if swallowed.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

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 Ltd 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.