

### 1. Identification of Substance & Company

#### Product

<b>Product name</b>	Wetting Solution concentrate	
<b>HSNO approval</b>	non hazardous	
<b>Approval description</b>	non hazardous	
<b>UN number</b>	NA	
<b>Proper Shipping Name</b>	NA	
<b>Packaging group</b>	NA	
<b>Hazchem code</b>	NA	
<b>Uses</b>	Wetting Solution concentrate of EV reagent kit	

#### Company Details

<b>Company</b>	<b>IZON Science Ltd</b>	
<b>Address</b>	8C Homersham Place Burnside Christchurch 8053 New Zealand	PO Box 39168 Burnside Christchurch 8053 New Zealand
<b>Telephone</b>	+64 3 357 4270	
<b>Fax</b>	+64 3 357 4273	
<b>email</b>	info@izon.com	
<b>Website</b>	www.izon.com	

### 2. Hazard Identification

#### Approval

This product is not considered to be a hazardous substance under the the Hazardous Substances and New Organisms Act (HSNO).

Classes	Hazard Statements
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none

#### SYMBOLS

none

#### Other Classifications

There are no other Classifications that are known to apply.

Not classified as hazardous in accordance with EC directives.

This product has been assessed according to GHS and has not been found to be hazardous.

#### Precautionary Statements

none

### 3. Composition / Information on Ingredients

Component	CAS/ Identification	Conc (%)
Wetting agent	proprietary	<0.1%
Sodium Azide	26628-22-8	<0.1%
Phosphate Buffered Saline (PBS)	mixture	balance

This is a commercial product whose exact ratio of components may vary. Trace quantities of impurities are also likely.

### 4. First Aid

#### General Information

If medical advice is needed, have product container or label at hand. You should seek medical advice if you feel that you may have been harmed or irritated by this product.

**Recommended first aid facilities** Ready access to running water is recommended.

<b>Exposure</b>	
<b>Swallowed</b>	Do NOT induce vomiting. Give a glass of water to drink. Contact a doctor if any symptoms occur.
<b>Eye contact</b>	If product gets in eyes, wash material from them with running water for several minutes. If any symptoms persist, seek medical advice.
<b>Skin contact</b>	Flush immediately with large amounts of water. Remove all contaminated clothing. Contact a doctor if experiencing any symptoms.
<b>Inhaled</b>	Generally, inhalation of fumes is unlikely to result in adverse health effects. If coughing, dizziness or shortness of breath is experienced, remove the patient to fresh air immediately. If patient is unconscious, place in the recovery position (on the side) for transport and contact a doctor.
<b>Advice to Doctor</b>	
Treat symptomatically	

### 5. Firefighting Measures

<b>Fire and explosion hazards:</b>	There are no specific risks for fire/explosion for this chemical. It is non-flammable.
<b>Suitable extinguishing substances:</b>	Carbon dioxide, extinguishing powder, foam, fog sprays.
<b>Unsuitable extinguishing substances:</b>	Unknown
<b>Products of combustion:</b>	Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Oxides of phosphorous, hydrogen chloride gas, potassium oxides, sodium oxides. May form toxic mixtures in air and may accumulate in sumps, pits and other low-lying spaces, forming potentially explosive mixtures.
<b>Protective equipment:</b>	No special measures are required.
<b>Hazchem code:</b>	Not applicable

### 6. Accidental Release Measures

<b>Containment</b>	There is no current legal requirement for containment of this product.
<b>Emergency procedures</b>	Generally the containers size will limit a large spill from occurring. If a significant spill occurs: Stop leak if safe or necessary. Isolate area. Collect spill, see below. Transfer to container for disposal. Dispose of according to guidelines below (Section 13).
<b>Clean-up method</b>	This product is not considered flammable or ecotoxic. Small spills do not require any special clean up method. Larger spills (e.g., greater than 10kg) should be mopped up and collected.
<b>Disposal</b>	Mop up and collect recoverable material into labelled containers for recycling or salvage. Recycle containers wherever possible. This material may be suitable for approved landfill. Dispose of only in accord with all regulations.
<b>Precautions</b>	No special protective clothing is normally necessary.

### 7. Storage & Handling

<b>Storage</b>	Avoid storage of harmful substances with food. Containers should be kept closed in order to minimise contamination. Keep from extreme heat and open flames. Avoid contact with incompatible substances as listed in Section 10. <b>Keep out of reach of children.</b>
<b>Handling</b>	Keep exposure to a minimum, and minimise the quantities kept in work areas. See section 8 with regard to personal protective equipment requirements.

### 8. Exposure Controls / Personal Protective Equipment

#### Workplace Exposure Standards

A workplace exposure standard (WES) has not been established by WorkSafe NZ for this product. There is a general limit of 10mg/m<sup>3</sup> for dusts and mists when limits have not otherwise been established.

NZ Workplace Exposure Stds (2013)	Ingredient	WES-TWA	WES-STEL
	Sodium Azide	Ceiling 0.11ppm (0.29mg/m <sup>3</sup> )	

#### International Limit Values for Sodium Azide (as NaN<sub>3</sub>), CAS number 26628-22-8

Country	Limit Value – Eight hours	Limit value – short term
Australia		Ceiling 0.11ppm (0.29mg/m <sup>3</sup> )
European Union	0.1mg/m <sup>3</sup>	0.3mg/m <sup>3</sup>
United Kingdom	0.1mg/m <sup>3</sup>	0.3mg/m <sup>3</sup>
United States		Ceiling: 0.1ppm as HN <sub>3</sub> (skin), 0.3 mg/m <sup>3</sup> as NaN <sub>3</sub> (skin)

#### Engineering Controls

In industrial situations, it is expected that employee exposure to hazardous substances will be controlled to a level as far below the WES as practicable by applying the hierarchy of control required by the Health and Safety in Employment Act 1992 (HSE). Exposure can be reduced by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods. If you believe air borne concentrations of mists, dusts or vapours are high, you are advised to modify processes or increase ventilation.

#### Personal Protective Equipment

<b>Eyes</b>	Protective eyewear is not normally necessary when using this product. However, it always prudent to use protective eyewear if splashes are likely or if handling material in bulk.
<b>Skin</b>	If discomfort is felt (e.g., if pre-existing conditions exist, such as dermatitis, cuts or sensitive skin), gloves may be helpful. If you suffer from dermatitis type skin conditions, use gloves. Nitrile or NBR gloves are recommended. Replace frequently. Gloves should be checked for tears or holes before use.
<b>Respiratory</b>	A respirator when airborne concentrations approach the WES (section 8). Use an organic vapour cartridge with a dust/mist filter. If using a respirator, ensure that the cartridges are correct for the potential air contamination and are in good working order.

#### WES Additional Information

Not applicable

### 9. Physical & Chemical Properties

<b>Appearance</b>	clear liquid
<b>Odour</b>	odourless
<b>pH</b>	7.2-7.6
<b>Vapour pressure</b>	no data
<b>Viscosity</b>	no data
<b>Boiling point</b>	no data
<b>Volatile materials</b>	no data
<b>Freezing / melting point</b>	no data
<b>Solubility</b>	soluble in water
<b>Specific gravity / density</b>	1.00
<b>Flash point</b>	non flammable
<b>Danger of explosion</b>	no data
<b>Auto-ignition temperature</b>	no data
<b>Upper &amp; lower flammable limits</b>	no data
<b>Corrosiveness</b>	non corrosive

### 10. Stability & Reactivity

<b>Stability</b>	Stable
<b>Conditions to be avoided</b>	Containers should be kept closed in order to avoid contamination. Keep from extreme heat and open flames.
<b>Incompatible groups</b>	none known
<b>Substance Specific Incompatibility</b>	none known
<b>Hazardous decomposition products</b>	none known
<b>Hazardous reactions</b>	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.

#### Supporting Data

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

### 12. Ecological Data

#### Summary

This material is not considered to be ecotoxic.

#### Supporting Data

<b>Aquatic</b>	No evidence of aquatic toxicity for any of the ingredients present >1%.
<b>Bioaccumulation</b>	No evidence of bioaccumulation
<b>Degradability</b>	Expected to be rapidly degradable.
<b>Soil</b>	No evidence of soil toxicity.
<b>Terrestrial vertebrate</b>	Not considered to be toxic towards terrestrial vertebrates
<b>Terrestrial invertebrate</b>	No evidence of toxicity towards terrestrial invertebrates.
<b>Biocidal</b>	no data
<b>Environmental effect levels</b>	No EELs are available for this mixture or ingredients

### 13. Disposal Considerations

<b>Restrictions</b>	There are no product-specific restrictions, however, local council and resource consent conditions may apply, including requirements of trade waste consents.
<b>Disposal method</b>	Dispose of residue and solutions that cannot be reused to sewer. If this is not possible dilute with water (at least 5 times as much water) and drain.
<b>Contaminated packaging</b>	Rinse containers with water before disposal. Preferably re-cycle container, otherwise send to landfill or similar.

### 14. Transport Information

#### Land Transport Rule: Dangerous Goods 2005 - NZS 5433:2007

This mixture is not considered a hazardous substance for transport on land.

<b>UN number:</b>	NA	<b>Proper shipping name:</b>	NA
<b>Class(es)</b>	NA	<b>Packing group:</b>	NA
<b>Precautions:</b>	NA	<b>Hazchem code:</b>	NA

#### IMDG

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

<b>UN number:</b>	NA	<b>Proper shipping name:</b>	NA
<b>Class(es)</b>	NA	<b>Packing group:</b>	NA
<b>Precautions:</b>	NA	<b>EmS</b>	NA

#### IATA

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

<b>UN number:</b>	NA	<b>Proper shipping name:</b>	NA
<b>Class(es)</b>	NA	<b>Packing group:</b>	NA
<b>Precautions:</b>	NA	<b>ERG Code</b>	NA

### 15. Regulatory Information

#### NEW ZEALAND:

This substance is not considered to be hazardous under HSNO.

#### Specific Workplace Controls (as per HSNO approval referenced to Controls Matrix)

Not applicable

#### Other Legislation

In New Zealand, the use of this product may come under the Resource Management Act and Regulations, the Health, Safety in Employment Act and Regulations, local Council Rules and Regional Council Plans. All ingredients are listed in the New Zealand Inventory of Chemicals.

#### AUSTRALIA:

The ingredients in this formulation are compliant with the NICNAS regulations.

<b>Standard for the Uniform Scheduling of Drugs and Poisons (SUSMP)</b>	Not allocated
<b>Applicable prohibitions and notifications/licensing requirements</b>	Not listed
<b>Agricultural and Veterinary Chemicals Act</b>	Not listed
<b>Listing in the Australian Inventory of Chemical Substances (AICS)</b>	Ingredients are listed
<b>Additional information</b>	Not applicable

### 16. Other Information

<b>Abbreviations</b>	
<b>ADG code</b>	Australian code for the transport of dangerous goods by road and rail.
<b>AICS</b>	Australian Inventory of Chemical Substances
<b>Approval Code</b>	not applicable – non hazardous.
<b>CAS Number</b>	Unique Chemical Abstracts Service Registry Number
<b>Ceiling</b>	Ceiling Exposure Value: The maximum airborne concentration of a biological or chemical agent to which a worker may be exposed at any time.
<b>Controls Matrix</b>	List of default controls linking regulation numbers to Matrix code (e.g. T1, I16).
<b>EC<sub>50</sub></b>	Ecotoxic Concentration 50% – concentration in water which is fatal to 50% of a test population (e.g. daphnia, fish species)
<b>ERMA</b>	Environmental Risk Management Authority (now EPA)
<b>EPA</b>	Environmental Protection Agency (previously known as ERMA)
<b>GHS</b>	Globally Harmonised System of Classification and Labelling of Chemicals
<b>HAZCHEM Code</b>	Emergency action code of numbers and letters that provide information to emergency services, especially fire fighters
<b>HSNO</b>	Hazardous Substances and New Organisms (Act and Regulations)
<b>IARC</b>	International Agency for Research on Cancer
<b>LEL</b>	Lower Explosive Limit
<b>LD<sub>50</sub></b>	Lethal Dose 50% – dose which is fatal to 50% of a test population (usually rats).
<b>LC<sub>50</sub></b>	Lethal Concentration 50% – concentration in air which is fatal to 50% of a test population (usually rats)
<b>MSDS (SDS)</b>	Material Safety Data Sheet (or Safety Data Sheet)
<b>STEL</b>	Short Term Exposure Limit - The maximum airborne concentration of a chemical or biological agent to which a worker may be exposed in any 15 minute period, provided the TWA is not exceeded
<b>TWA</b>	Time Weighted Average – generally referred to WES averaged over typical work day (usually 8 hours)
<b>UEL</b>	Upper Explosive Limit
<b>UN Number</b>	United Nations Number
<b>WES</b>	Workplace Exposure Standard - The airborne concentration of a biological or chemical agent to which a worker may be exposed.

#### References

<b>Data</b>	Unless otherwise stated comes from the EPA HSNO chemical classification information database (CCID) <a href="http://www.epa.govt.nz/hs/compliance/chemicals.html">http://www.epa.govt.nz/hs/compliance/chemicals.html</a> , for specific chemicals.
<b>EPA Transfer Gazettes</b>	Classifications and controls assigned for specific ingredients (consolidated gazette, 2004)
<b>Controls Matrix</b>	Part of the EPA New Zealand User Guide to the HSNO Control Regulations
<b>WES 2013</b>	The NZ Workplace Exposure Standards Effective from 2013, published by WorkSafe NZ and available on their web site – <a href="http://www.worksafe.govt.nz">www.worksafe.govt.nz</a> .
<b>Other References:</b>	Suppliers SDS

#### Review

Date	Reason for review
May 2015	Not applicable – new SDS

#### Disclaimer

This SDS was prepared by Datachem LTD and is based on our current state of knowledge, including information obtained from suppliers. The SDS is given in good faith and constitutes a guideline (not a guarantee of safety). The level of risk each substance poses is relevant to its properties (as summarised in the SDS) AND HOW THE SUBSTANCE IS USED. While guidelines are given for personal protective equipment, such precautions must be relevant to the use. The likely HSNO classifications for this SDS have been estimated based on general information from the supplier (e.g., hazard, toxicological). This SDS is copyright Datachem and must not be copied, edited or used for other than intended purpose. To contact the SDS author, email [info@datachem.co.nz](mailto:info@datachem.co.nz) or phone: +64 9 940 30 80.

