



**Company Details:**

**Waterwell Projects (PTY) LTD**

**Reg No. 2001/018862/07**

Waterwell Projects (PTY) LTD  
Unit 4/5 Megazone Park  
Hertford Junction R512  
Lanseria  
1748

Tel: 011 300 9917/8 or 073 077 0973

Fax: 086 605 9360

Poison Centre: 0800 333 444

## MATERIAL SAFETY DATA SHEET

### 1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

#### a) Identification of the substance or preparation :

**1.1 Commercial name :** Waterwell Metal Out (packed 1L or 20L)

Chemical Family Sequestrant

Chemical Name Phosphonic acid

UN No: 3265 Hazchem Code: 2Z NIOSH No: Not Listed

### 1. COMPOSITION

Hazardous Components: (1-Hydroxyethylidene) diphosphonic acid

Concentration: <25%

TLV: N/a

EEC Classification: Not Listed

Risk Phrases: R20; R36/37/38; R34

**Information of Importer/ Packer:** Zodiac Pool Care South Africa (PTY) LTD  
Private Bag X127  
Halfway House  
1685  
Tel: 011 300 9917/8 or 011 237 3900  
Fax: 086 605 9360 or 011 314 5225

### 2. HAZARDS IDENTIFICATION

Main Hazard: Corrosive, irritating

Flammability: HMIS Rating :1

Chemical Hazard: Not available

Biological Hazard: No data available

Reproduction Hazard: No data available

Eye Effects – eyes:	Very hazardous to eyes (corrosive and irritating). Inflammation is characterised by redness, watering and itching.
Health Effects – skin:	Hazardous to skin (irritating). Skin contact may produce burns. Inflammation characterised by itching, scaling, reddening or occasionally blistering.
Health Effects – ingestion:	Not expected to be the primary route of exposure. Expected to be moderately toxic by ingestion.
Health Effects – inhalation:	May be harmful if inhaled. Do not breathe spray mists of the undiluted product. Effects will depend on strength of solution and length of time of exposure.
Carcinogenicity:	Refer Section 11 ; Toxicological Information
Mutagenicity:	Refer Section 11 ; Toxicological Information
Neurotoxicity:	Refer Section 9 ; Physical and Chemical Properties

### 3. FIRST AID MEASURES

Product in the eye:	Flush immediately with copious amounts of tap water or normal saline solution for a minimum of 15 minutes. Take exposed individual to a physician, preferably an ophthalmologist, for further evaluation.
Product on the skin:	Wash exposed area with plenty of water. Repeat washing. Remove contaminated clothing and wash thoroughly before re-use. If irritation persists, consult a physician.
Product ingested:	DO NOT INDUCE VOMITING. Rinse with copious amounts of water or milk first. Irrigate the oesophagus and dilute stomach contents by slowly giving one (1) or two (2) glasses of water or milk. Avoid giving alcohol or alcohol related products. In cases where the individual is semi-comatose, comatose or convulsing, DO NOT GIVE FLUIDS BY MOUTH. In case of intentional ingestion of the product, seek medical assistance immediately; take individual to nearest medical facility.
Inhalation:	If exposure by inhalation is suspected, immediately move exposed individual to fresh air. If individual experiences nausea, headache, dizziness, has difficulty in breathing or is cyanotic, seek medical attention immediately.

NOTE TO PHYSICIAN: No product specific antidote is known. Probable mucosal damage may containdicate the use of gastric lavage.

Treat symptoms. For specialist medical advice in the event of an emergency contact 031-560 5288.

#### 4. FIRE FIGHTING MEASURES

Extinguishing Media: Water spray, carbon dioxide, alcohol-resistant foam, dry chemical

powder. Never use water jet.

Special Hazards: Non-flammable aqueous solution. The residue will burn after the water has evaporated. Decomposes in a fire giving off irritant fumes and vapours: CO, CO<sub>2</sub>, Pox.

Protective Clothing: Fire-fighters should wear positive pressure self-contained breathing apparatus and full turnout gear.

#### 5. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Rubber gloves and safety glasses or goggles required.

Eye wash fountains in the work place are strongly recommended.

Body-protective clothing and shoes are recommended. If splashing can occur, the use of a face shield is recommended.

Use a self-contained breathing apparatus where misting may occur.

Environmental Precaution: Do not discharge concentrated, undiluted product into lakes, streams, ponds, estuaries, oceans and other waters.

Spills: Liquids: Dam area to prevent spill from spreading. Clay, soil or commercially available absorbents may be used to recover any material that cannot be recovered as pure product. Liquids/Solids/Powder: Minimise adverse effects on the environment. Recover as much as possible of the pure product into appropriate containers. Later, determine if this recovered product can be used for its intended purpose. Dispose of in an approved landfill.

#### 6. HANDLING AND STORAGE

Suitable Material: Polypropylene, Teflon, PVC-rigid, Buna-N rubber, Viton, PVC-flexible, Silicone rubber, Tygon tubing R3603, Van Leer epoxy liner 136, Polyethylene.

Handling/Storage Precautions:

The handling precautions for this product are based on the characteristics of the neat product unless otherwise specified. Store in a cool dry place. Rubber gloves and

safety goggles are required. Body-protective clothing and safety shoes are required. Eye-wash fountains in the work place are strongly recommended.

## 7. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits:	None
Engineering Control Measures:	Provide local exhaust ventilation.
Personal Protection – Respiratory:	In case of insufficient ventilation, wear-suitable respiratory equipment.
Personal Protection – Hand:	Rubber gloves.
Personal Protection – Eye:	Safety goggles are required.
Personal Protection – Skin:	Body-protective clothing and safety shoes are recommended. Where splashing can occur, a protective face-shield is required.
Other Protection:	Eye wash fountain in the workplace is strongly recommended.

## 8. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear colourless to pale yellow liquid.
Odour:	Slight characteristic.
Ph:	< 2 (1% soln).
Boiling Point::	>100°C
Melting Point:	-25°C
Flash Point:	>100°C (Tagliabue c.c)
Flammability:	HMIS Rating : 1
Autoflammability:	Not available.
Explosive Properties:	Not available.
Oxidising Properties:	None.
Vapour Pressure:	
Density:	1,44 – 1,46 g/ml
Solubility in Water:	Completely miscible in water.

Solubility-solvent:

Solubility Coefficient:

Neurotoxicity:

## 9. STABILITY AND REACTIVITY

Conditions to avoid: Stable under normal conditions of use and storage.

Incompatible Materials: Strong oxidisers, strong bases. Attacks many metals with liberation of hydrogen which is inflammable and forms explosive mixture with air.

Hazardous Decomposition Products: Combustion decomposition : CO, CO<sub>2</sub>, Pox. Acids of phosphorous.

## 10. TOXICOLOGICAL INFORMATION

Acute Toxicity Oral LD<sub>50</sub> (rat) = 2000 mg/kg. Dermal LD<sub>50</sub> (rat) = 3 500 mg/kg; (rabbit) = 10 000 mg/kg.

Skin and Eye Contact: Very hazardous to eyes and hazardous to skin.

Chronic Toxicity: Repeated exposure to the concentrated product may cause damage to the following organs: blood, gastrointestinal tract, upper respiratory tract, skin, eyes, bones.

Carcinogenicity: Not listed in any of OSHA Standard, Section 1910. 1200 sources as carcinogenic; not tested by Buckman Laboratories, Inc.

Mutagenicity: No data available.

Reproduction Hazard: No data available.

## 11. ECOLOGICAL INFORMATION

Aquatic Toxicity – Fish: 96 hr. LC<sub>50</sub>: Rainbow trout = 368 mg/l; 96 hr. LC<sub>50</sub>: Bluegill sunfish = 868 mg/l; 96 hr. LC<sub>50</sub>: Sheepshead minnow = 2180 mg/l.

Aquatic Toxicity: Not toxic to aquatic organisms and not suspected of long-term adverse effects in the aquatic

environment. 48 Hr. EC 50: Daphnia magna = 527 mg/l ; 96 Hr. EC50: Grass shrimp = 1770 mg/l.

Aquatic Toxicity – Algae:

Not available.

Avian Toxicity:

Oral LD 50: Mallard duck = . 2 510 mg/kg bw.  
Oral LD 50: Bobwhite quail = > 2 510 mg/kg bw.  
Not classified as harmful to birds.

Biodegradability:

Bio – Accumulation:

Mobility:

German wgk:

## 12. DISPOSAL CONDITIONS

Disposal Method

Product is hazardous waste due to pH. Dispose in an approved landfill.

Disposal of Packaging:

Dispose of drums through a registered drum re-conditioning company. Dispose of packaging other than drums, e.g. Flexi-bags, through a registered waste disposal company in an approved landfill.

## 13. TRANSPORT INFORMATION

Un No.:

3265

Substance Identity No.:

3265

Dot Class:

8 Corr. Liquid, acidic, organic n.o.s.

ADR/RID Class:

8 Corr. Liquid, acidic, organic.

ADR/RID Item Number:

Not available.

ADR/RID Hazard Identity Number:

Not available.

IMDG – Shipping Name:

Corr. Liquid, acidic, organic n.o.s.

IMDG – Page:

8147-1.

IMDG – Class:

8 Corr. Liquid, acidic, organic n.o.s.

IMDG – Packaging Group:

III

IMDG – Marine Pollutant:

No

EMS No.:	8-15
MFAG Table No.:	760,4.3
IATA – Shipping Name:	Corr. Liquid, acidic, organic n.o.s.
IATA – Class:	8 Corrosive Liquid
IATA – subsidiary risk(s):	None
ADNR – Class:	8 Corrosive Liquid
UK – Description:	8 Corrosive Liquid
UK – Emergency Action Class:	153
UK – Classification:	8 Corrosive Liquid
Tremcard No:	BLB7016

#### **14. REGULATORY INFORMATION**

EEC – Hazard Classification:	Not Listed
Risk Phrases:	R20; R36/37/38; R34
Safety Phrases:	S26; S62; S28
National Legislation:	None known
FDA Approvals:	173.310 (Boiler water additives)

#### **15. OTHER INFORMATION**

The information herein is given in good faith and to the best of our knowledge at the current date. The accomplishment of the instructions herein does not exempt the user from following the legal and administrative regulations relative to product, environmental safety and hygiene, which are user's own responsibility. In case of mixture with other substances, ensure that other risks are not generated.

Revised: 30 October 2013