

MATERIAL SAFETY DATA SHEET

No. 1A

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Syntez Technologies (Pty) Ltd
Reg No: 2005/033956/07

Emergency telephone number: 082 392 2145
E-mail: piet@alfatechnologies.co.za

P.O. Box 73106
Lynnwood Ridge
0040

Emergency telephone number: 082 471 8000
E-mail: francois@alfatechnologies.co.za

A subsidiary of the Welmel Holdings Group

SECTION 1. PRODUCT IDENTIFICATION

(page 1 may be used as an emergency safety sheet)

Trade name: Oxilyte™
Registration no: ACT29GNR529/258996/070/684
Complies with: SANS1826/1853
Chemical family: Chlorine derivative
Chemical name: Anolyte
Synonyms: Electro chemically Activate Anolyte
Electro Generated Oxidant Anolyte
Magnetic Dipole Structured Anolyte

Composition:

INGREDIENT	CAS-No	EINECS-No	VOLUME
Water	7732-18-5	231-791-2	99,70%
Sodium Chloride	7647-15-5	231-598-3	0,30%
After Activation:			<200ppm Oxidants
Hypochlorous Acid	7790-92-3	232-232-5	<170 ppm
Hypochlorite ion	7681-52-9	31-668-3	<25 ppm
Ozone	10028-15-6	233-069-2	<2,5 ppm
Chloine Dioxide	10049-04-04	233-233-0	<2.5 ppm

The active combined solution of Oxidants is in a meta-stable condition / disequilibrium after activation, and gradually revert to its constituting primary substances and ingredients.

SECTION 2. COMPOSITION

The product is manufactured out of food-grade salt and potable water.

Physical Appearance: Colorless liquid
Immediate Concerns: None under normal usage conditions.
Hazardous components: Diluted solution of Free chlorine, Bound chlorine, Hydrogen peroxide and Ozone.
CE classification: Class 4 of hazardous substances
Chemical nature: Weak acid
R Phrases: RM 22
CAS number: 7732-18-5
7647-15-5

SECTION 3. HAZARD IDENTIFICATION

Main hazard:	Contain minute amounts of chlorine. Classified as non dangerous (88/279/EWG)
Flammability:	Non Flammable
Chemical hazard:	No chemical hazard
Biological hazard:	No biological hazard
Reproductive hazard:	No reproductive hazard
Eye effects:	In its strongest form it may cause Irritation to the eyes
Health effects - skin:	Classified as non irritating to the skin
Health effects - ingestion:	In its strongest form may cause Irritation to throat and digestive system
Health effects - inhalation:	No effect at recommended dose
Carcinogenicity:	None
Mutagenicity:	None
Neurotoxicity:	None
Danger Symbols:	None
Dangerous component identification:	None

SECTION 4. FIRST AID MEASURES

Signs and symptoms of Poisoning:	None
First Aid procedures:	None
Emergency antidote:	None
Product in eye:	Flush with cool fresh water
Product on skin:	When irritation occurs wash with soap and warm water
Product ingested:	Rinse mouth and drink cool fresh water. Do not induce vomiting
Product inhaled:	Remove the patient to fresh air

SECTION 5. FIRE FIGHTING MEASURES

Extinguishing media:	Non flammable - Chemical type foam, powder, sand, water spray
Hazardous combustion components:	Oxides of Chlorine present
Special hazards:	None
Protective clothing:	None required

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	No protection required
Environmental precautions:	No special precautions required
Small spills:	Absorb on paper or other inert material. Flush area with water
Large spills:	Wash into the water system with large excess of running water. There is no potential risk to the environment

SECTION 7: HANDLING AND STORAGE

Suitable material:	Plastic / Glass
Handling / storage precautions:	Store in a securely closed and properly labeled container. Store in a cool place with maximum temperature of 25 degr. Celsius Store out of direct sunlight

SECTION 8 : EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure limits:	Not available
Engineering control measures:	General engineering measures such as mechanical ventilation (dilution and local exhaust), process or personnel enclosure, control of process conditions and process modification (example - using a hazardous material). Use a no-sparking, grounded ventilation system separate from other exhaust ventilation systems. Supply sufficient replacement air to make up for air removed by exhaust system.
Personal protection - respiratory:	Not required
Personal protection - hand:	Not required
Personal protection - eye:	Not required
Personal protection skin:	Not required
Other protection:	Not required

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Homogenous, clear, colourless liquid
Odour:	Chlorine odour depending on strength of solution
pH:	approximately 3.0 pH, ± 0.5
Oxidization Reduction Potential	ORP = 1000 ± 150 mV
Boiling point:	100 degr. C.
Melting point:	0 degr. C
Flash point:	Not combustible
Flammability:	Not flammable
Autoflammability:	Not auto flammable
Explosive properties:	none
Oxidizing properties:	mild oxidizing capability, specifically on black steel.
Vapour pressure:	not known
Density:	1,000 kg.m3
Solubility: - water	Completely soluble
Solubility: - solvent:	Insoluble
Solubility: - coefficient:	Not available
Neurotoxicity:	None

SECTION 10 : STABILITY & REACTIVITY

Conditions to avoid:	> 25 degr C and direct sunlight
Incompatible materials:	Black steel
Hazardous decomposition products:	None

SECTION 11: TOXICOLOGICAL INFORMATION

Acute toxicity:	Non toxic
Acute dermal irritation:	None
Skin and eye contact:	May cause irritation to the eye
Chronic toxicity:	No evidence of toxicity or adverse pharmacological effects
Carcinogenicity:	None
Mutagenicity:	None
Reproductive hazards:	None

SECTION 12: ECOLOGICAL INFORMATION

Aquatic toxicity - fish:	Not toxic at recommended dose
Aquatic toxicity - daphnia	not known
Aquatic toxicity - algae:	none
Biodegradability:	Totally biodegradable
Bio-accumulation:	none
Mobility:	not available
German wgk:	not available

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal methods:	Wash down the drain with excess water
Disposal of packaging:	Dispose of in a safe way in accordance with local regulations.

SECTION 14: TRANSPORT INFORMATION

Non hazardous for transport	Packaging in plastic containers, without any safety requirements necessary.
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SECTION 15: REGULATORY INFORMATION

CE hazard classification:	Class 4 harmful substance
Risk phases:	R22 Harmful if swallowed
Safety phases:	S3/7/9 Keep container tightly closed in a cool, well ventilated place S46 If swallowed, seek medical advice and show the label where possible.
National legislation:	National Road Traffic Act, 1996 (Act 93 of 1996) Fire Brigade Services Act, 1987 (Act 99 of 1987) Occupational Health and Safety Act, 1993 (Act 85 of 1993)

SECTION 16: SAFETY PROCEDURES DURING MANUFACTURING

Main Hazard:	Frees limited Hydrogen gas during production. Avoid all naked flames. Frees moderate levels of chlorine gas during the startup phase of the unit. Use breathing apparatus.
Skin	Wash with soap and warm water

SECTION 16: OTHER INFORMATION

For any additional information please contact your local distributor, or the numbers at the top of this document.

DISCLAIMER: The information contained herein is based on our current knowledge, and proven results under international standards and is intended to describe the product for the purposes of health and safety requirements only. It should not, therefore, in itself be construed as a guarantee of any specific quality or performances relating to the product, which will depend on the terms of the contract of trial or sale. The user must satisfy himself/herself that the product is suitable for his/her purpose.