SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

GHS PRODUCT IDENTIFIER

AQT 773

OTHER MEANS OF IDENTIFICATION

CAS:	Mixture not listed in registry
EC:	Mixture not listed in registry
RTECS:	Mixture not listed in registry
ICSC:	Mixture not listed in registry
GESTIS DATABASE:	Mixture not listed in registry
CHEMICAL FAMILY:	Mixture not determined
SYNONYMS:	None
PROPER SHIPPING NAME:	NOT REGULATED FOR TRANSPORT
CHEMICAL FORMULA:	Mixture not determined
PRODUCT STOCK CODE/S:	AQT773A(25Kg)
SDS LINK:	http://aquatradesa.ddns.net/owncloud/index.php/s/y9dACZkTvevI4aI\

RECOMMENDED USE	RESTRICTIONS ON USE
AQT 773 is a specially formulated product suitable for cleaning RO membranes and other surfaces. It is used specifically for removing calcium sulphate from membranes and other surfaces. It will also remove some other deposits and foulants, but it is not cost effective for these in the absence of calcium sulphate.	Not for end user consumption. Not for food, drug, medical or household use.

SUPPLIER'S DETAILS

AQUATRADE WATER TREATMENT CHEMICALS (PTY) LTD

22 Grader Rd, Spartan
Gauteng, South Africa
Tel: +27 11 394 0752
info@aquatradesa.co.za
www.aquatradesa.co.za

PO Box 357
Isando, 1600

SDS Enquiries only

sheq@aquatradesa.co.za Tel: +27 87 654 3326

EMERGENCY PHONE NUMBER		
NAME	**TEL**	**HOURS AVAILABLE**
SPECIALIST		
S. Biondi	+27 68 237 2033	Mon. – Fri. 05:00 –20:00 GMT
H. van Niekerk	+27 82 410 5540	Mon. – Fri. 05:00 –20:00 GMT
Spilltech	+27 86 100 0366	24/7
OPERATOR		
SHEQ Coordinator	+27 76 590 9559 +27 87 654 3326	24/7 Mon. – Fri. 06:00 –18:00 GMT

SECTION 2 — HAZARDS IDENTIFICATION

CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

Acute toxicity, Oral (Category 4), H302
Skin Corrosion/Irritant (Category 3), H316
Serious Eye Damage/Eye Irritation, (Category 1), H318

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

GHS LABEL ELEMENTS

GHS SIGNAL WORD

DANGER

GHS HAZARD CODES

Harmful if swallowed.
Causes mild skin irritation.
Causes serious eye damage.

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

GHS PRECAUTIONARY CODES

Wash hands thoroughly after handling.
Do not eat, drink, or smoke when using this product.
Wear protective gloves/protective clothing/eye protection/face protection.
IF SWALLOWED: Immediately call a POISON CENTER/doctor.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Specific treatment (see IF SWALLOWED, IF IN EYES on this label).
Rinse mouth.
Store locked up.
Dispose of contents and container in accordance with local, regional, national, international regulations.

PICTOGRAMS

OTHER HAZARDS WHICH DO NOT RESULT IN CLASSIFICATION

This substance/mixture contains no components considered to be either persistent, bio accumulative and toxic (PBT), or very persistent and very bio accumulative (vPvB) at levels of 0.1% or higher.

SECTION 3 — COMPOSITION/INFORMATION ON INGREDIENTS

SUBSTANCE	CAS	EC	MIN %	MAX %	HAZARD NOTES
Chelant					H302: Harmful if swallowed. H318: Causes serious eye damage.
Inorganic Salt					H302: Harmful if swallowed. H319: Causes serious eye irritation.

SECTION 4 — FIRST-AID MEASURES

DESCRIPTION OF NECESSARY FIRST AID MEASURES

Call 112 or 10177 or your local emergency help number immediately, for emergency assistance. Call the Poison Control Center at +27 21 931 6129 – Tygerberg or +27 21 658 5308 – Red Cross, Email: poisonsinformation@uct.ac.za, Website: https://www.afritox.co.za for further instructions. Provide them with information such as the compound taken, quantity and time of ingestion, age, weight, and general health status of affected individual. Carefully remove the individual from the exposure area.

IF INHALED	Call a physician immediately. ONLY induce vomiting at the instructions of a physician. If victim is conscious, rinse mouth and give water to drink. Never give anything by mouth to an unconscious person.
IF IN CONTACT WITH EYES	Flush eyes with large quantities of running water for a minimum of 15 minutes. If easy to do, remove contact lenses, if worn. Hold the eyelids apart during the flushing to ensure rinsing of the entire surface of the eye and lids with water. DO NOT let victim rub eye(s). DO NOT attempt to neutralize with chemical agents. Oils or ointments should not be used at this time. Get medical attention.
IF IN CONTACT WITH SKIN	Remove contaminated clothing, shoes, and equipment. Flush skin with plenty of water for at least 5 minutes while removing contaminated clothing and shoes. Wash contaminated clothing and shoes before reuse. Get medical attention if irritation symptoms occur.
IF INGESTED	Call a physician immediately. ONLY induce vomiting at the instructions of a physician. If victim is conscious, rinse mouth and give water to drink. Never give anything by mouth to an unconscious person.

MOST IMPORTANT SYMPTOMS/EFFECTS, ACUTE and DELAYED

Eyes: Eye contact causes moderate irritation.
Skin: Skin contact does not cause irritation to intact skin but may cause moderate irritation to damaged skin.
Inhalation: Exposure to an excessive concentration of vapour, mist, or aerosol of the product in solution may cause respiratory tract discomfort and/or irritation.
Ingestion: If swallowed, this product may cause irritation of the digestive tract.

INDICATION OF IMMEDIATE MEDICAL ATTENTION & SPECIAL TREATMENT NEEDED, IF NECESSARY

Attending physician should treat exposed patients symptomatically.

SECTION 5 — FIRE-FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA	Use water fog or spray, dry chemical, foam or carbon dioxide extinguishing agents.
EXTINGUISHING MEDIA NOT SUITABLE	None indicated.
SPECIFIC HAZARDS ARISING FROM THE CHEMICAL	**Fire & Explosion Hazards**: This product is not defined as flammable or combustible and should not be a fire hazard. Under fire conditions, it does not contribute any unusual hazards. **Hazardous Combustion Products**: Thermal decomposition products may release toxic and/or hazardous fumes and gases, including nitrogen oxides, carbon oxides and ammonia.
SPECIAL PROTECTIVE ACTIONS FOR FIRE-FIGHTERS incl. PPE	As in any fire, prevent human exposure to fire, smoke, fumes, or products of combustion. Evacuate all non-essential personnel from the fire area. Fire fighters should wear full-face, self-contained breathing apparatus and impervious protective clothing. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PPE & EMERGENCY PROCEDURES	All personnel involved in spill clean-up should follow good industrial hygiene practices and avoid skin and eye contact by wearing appropriate personal protective equipment. Refer section 8.
ENVIRONMENTAL PRECAUTIONS	**Avoid** release to the environment.

METHODS & MATERIALS FOR CONTAIMENT & CLEANING UP	Safely stop source of spill. Restrict non-essential personnel from area. Sweep up powder and place in a labelled chemical waste container for disposal according to local regulations.

SECTION 7 — HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING	Ensure thorough ventilation of stores and work areas. Avoid inhalation and prolonged and/or repeated skin and eye contact. Wear goggles or face shield, gloves, and protective clothing when handling.
CONDITIONS FOR SAFE STORAGE	Keep containers closed and dry. This material is suitable for any general chemical storage area. Isolate from incompatible materials such as strong oxidizing agents. Store solution in PVC, PE, or stainless-steel tanks. Avoid contact with aluminium, copper, copper alloys, nickel, and zinc. **Maximum Storage Temperature**: Store in sealed or original containers at temperatures between 0 and 35°C. **General Comments**: Containers should not be opened until ready for use. It is recommended that products be retested if stored for more than 3 years. Under ideal storage conditions, the shelf-life is almost indefinite. **Storage duration**: 36 Months From the data on storage duration in this safety data sheet no agreed statement regarding the warrantee of application properties can be deduced.
INCOMPATIBILTIES	**Conditions to avoid: H**eat, Direct Sunlight. **Substances to avoid:** Strong Oxidizing agents.
SANS 10263-0 WAREHOUSING	No provisions.

SECTION 8 — EXPOSURE CONTROLS AND PERSONAL PROTECTION

CONTROL PARAMETERS

OCCUPATIONAL EXPOSURE LIMITS (OEL)	**Hydrogen chloride HCl:** Short Term OEL-RL 10 ppm, Short Term OEL-RL 7 mg/m³. **Ammonia NH3:** TWA OEL-RL 25 ppm, TWA OEL-RL 17 mg/m³, Short Term OEL-RL 35 ppm, Short Term OEL-RL 24 mg/m³. **Ammonium Chloride - Fumes NH4Cl:** TWA OEL-RL 10 mg/m³, Short Term OEL-RL 20 mg/m³.
ADDITIONAL EXPOSURE LIMITS UNDER THE CONDITIONS OF USE	Contains no substances with biological exposure indices.
DNEL/DMEL AND PNEC-VALUES	No additional data

APPROPIATE ENGINEERING CONTROLS

Special ventilation is usually not required under normal use conditions. However, ensure that existing ventilation is sufficient to prevent the circulation and/or accumulation of dust in the air.

INDIVIDUAL PROTECTION MEASURES

EYE PROTECTION		Safety glasses with side-shields or safety goggles Use equipment for eye protection tested and approved under appropriate government standards such as SANS 50166:2018. Contact lenses should not be worn as they may contribute to severe eye injury.

FACE PROTECTION		Not required during normal use. If the face is at risk a protective shield must also be worn tested and approved under appropriate government standards such as SANS 1400:2010.
HAND PROTECTION		Use protective gloves. The glove material must be sufficiently impermeable and resistant to the substance. Check the tightness before wear. Gloves should be well cleaned before being removed, then stored in a well-ventilated location. Pay attention to skin care. Skin protection cremes do not protect sufficiently against the substance. Textile or leather gloves are completely unsuitable. Currently there is no information available regarding suitable glove materials. Ask the manufacturer for suitable materials. Suggested material: Neoprene, Nitrile, Rubber or PVC Gloves If used in solution, or mixed with other substances, and under conditions which differ from SANS 416:2021 or SANS 1228:2012, contact the supplier of the CE approved gloves.
BODY PROTECTION		Complete suit protecting against chemicals tested and approved under appropriate government standards such as SANS 54325:2019. 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 half-face particle respirator type P2, SANS 50149:2003 as a backup to engineering controls. If the respirator is the sole means of protection, use an elastomeric full-face respirator. Use respirators and components tested and approved under appropriate government standards such as SANS 50149: 2003, SANS 50136:1998, SANS 50137:2011, SANS 50140:1998 or appropriate EU or ANSI standards. Consult the respirator manufacturer to determine the appropriate type of equipment for a given application. Observe respirator use limitations specified by the manufacture.

NOTE: The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors. Recommendations above is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

General safety and hygiene measures

Avoid breathing dust. **Avoid** contact with the skin, eyes, and clothing. Handle in accordance with good industrial hygiene and safety practice. Wearing of closed work clothing is required additionally to the stated personal protection equipment.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE (PHYSICAL STATE, COLOUR ETC):	White Powder
ODOUR:	Ammonia Odour
ODOUR THRESHOLD:	No test data available
pH:	6.5 – 8.5 (1% Aq. Sol.)
MELTING/FREEZING POINT:	No test data available
INITIAL BOILING POINT AND BOILING RANGE:	No test data available
FLASH POINT:	Do not flash
EVAPORATION RATE:	No test data available
FLAMMABILITY (SOLID, GAS):	Not flammable
UPPER/LOWER FLAMMABILITY OR EXPLOSIVE LIMITS:	Not explosive
VAPOUR PRESSURE:	No test data available

VAPOUR DENSITY:	No test data available
RELATIVE DENSITY:	Not applicable
SOLUBILITY(IES):	Miscible in water
PARTITION COEFFICIENT: N-OCTANOL/WATER:	No test data available
AUTO-IGNITION TEMPERATURE:	No test data available
DECOMPOSITION TEMPERATURE:	No test data available
VISCOSITY:	No test data available
OXIDIZING PROPERTIES:	Non-Oxidizing

NOTE: The physical data presented above are typical values and should not be construed as a specification.

SECTION 10 — STABILITY AND REACTIVITY

REACTIVITY	No hazardous reactions if stored and handled as prescribed/indicated. **Corrosion to metals**: Corrosive effect on metals. **Remarks**: Forms no flammable gases in the presence of water.
CHEMICAL STABILTY	The product is stable if stored and handled as prescribed/indicated. This product is stable at ambient temperatures and atmospheric pressures. It is not self-reactive and is not sensitive to physical impact.
POSSIBILTY of HAZARDOUS REACTIONS	Aqueous solution in contact with aluminium evolves hydrogen. Hazardous polymerisation will not occur under normal conditions.
CONDITIONS TO AVOID	High temperature. Poor ventilation. See SDS section 7 - Handling and storage.
INCOMPATIBLE MATERIALS	This product is incompatible with strong oxidizers. Aqueous solution in contact with aluminium evolves hydrogen. Avoid contact with aluminium, zinc, and other metals. **Corrosivity** Corrosive to stainless steel, zinc, and aluminium.
HAZARDOUS DECOMPOSITION PRODUCTS	Under fire conditions the product may support combustion and decomposes to give off carbon oxides fumes (CO, CO2), nitrogen oxides, ammonia, and water vapour.

SECTION 11 — TOXICOLOGICAL INFORMATION
TOXICOLOGICAL (HEALTH) EFFECTS

ACUTE TOXICITY	Harmful if swallowed.
SKIN CORROSION/IRRITATION	Causes mild skin irritation.
SERIOUS EYE DAMAGE/EYE IRRITATION	Causes serious eye damage.
RESPIRATORY OR SKIN SENSITIZATION	Based on available data, the classification criteria are not met.
GERM CELL MUTAGENICITY	Based on available data, the classification criteria are not met.
CARCINOGENICITY	Based on available data, the classification criteria are not met.
REPRODUCTIVE TOXICITY	Based on available data, the classification criteria are not met
SPECIFIC TARGET ORGAN TOXICITY – SINGLE EXPOSURE	Based on available data, the classification criteria are not met.
SPECIFIC TARGET ORGAN TOXICITY – REPEATED EXPOSURE	Based on available data, the classification criteria are not met.

ASPIRATION HAZARD	Based on available data, the classification criteria are not met.

LIKELY SOURCES OF EXPOSURE

INHALATION	EYES	SKIN	INGESTION
Unlikely	Likely	Likely	Rare
Unpacking or mixing of product.	Unpacking or mixing of product.	Unpacking or mixing of product.	Unpacking or mixing of product.

SYMPTOMS RELATED TO PHYSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS

INHALATION:

Acute exposure: The acute LC50 for this product is not available. There were no clinical signs of toxicity when rats were exposed for 8 hours to an atmosphere enriched with a related product. Exposure to an excessive concentration of vapor, mist or fumes may cause respiratory tract discomfort and/or mild irritation.
Chronic exposure: No known effects.

SKIN:

Acute contact: Dermal toxicity (LD50) for this product is >2 000mg/kg. A solution containing 47% in water was not irritating to intact rabbit skin. However, moderate irritation was observed on abraded skin after each application.
Chronic contact: No known effects.

EYES:

Moderately irritating to rabbit eyes. Severe pain and slight conjunctivitis were reported. Conjunctival irritation subsided after 48 hours**.**

INGESTION:

Acute exposure: The oral LD50 is greater than 3 600 mg/kg (rat) for a 47% solution in water and greater than 1 692 mg/kg for 100% active material.
Chronic exposure: No other known effects for the mixture.

SENSITIZATION:

No data available for this product. However, a few dermatitis patients were reported to have had positive reactions when patch tested. But no positive reactions were reported over the course of several years when it was included as part of the North American Contact Dermatitis Group's screening tray.

CARCINOGENICITY:

IARC, NTP, ACGIH or OSHA does not classify this material as a carcinogen or suspect carcinogen. A related product was not carcinogenic to rats and mice in a 2-year diet study.

MUTAGENICITY:

Related products are not mutagenic in a series of tests, including the Ames Assay and the Mouse Lymphoma. However, a related product was found to be weakly mutagenic in microbial systems.

REPRODUCTIVE TOXICITY:

Related salts have been reported, in some studies, to cause birth defects in laboratory animals only at exaggerated doses that were toxic to the mother. These effects are likely associated with zinc deficiency due to chelation. Exposures having no effect on the mother should have no effect on the foetus. The following data is available for a related product: It is not teratogenic under conditions of the test [Pregnant female rats were administered 1 374mg /kg/day on gestation days 7 to 14 in half the dose, twice daily. Clinical signs of maternal toxicity included diarrhoea, reduced weight gain and depressed activity.

CYTOTOXICITY:

A related salt did not damage normal rat kidney cells at doses of 0.1 to 20 µM. Long term exposure to 0.1 or 5.0 µM was not toxic and did not inhibit DNA synthesis.

OTHER TOXICOLOGICAL EFFECTS:
A related salt administered to mice in drinking water at a dose of 25mM, caused a reduction of calcium in bone, liver, and muscle. Zinc was reduced in kidneys, muscle, and liver. Magnesium was reduced in bones and liver but was increased in the kidneys.

TARGET ORGANS:
Eyes and reproductive system (in presence of maternal toxicity).

There are extensive toxicity data available on related salts. An adequate representation of all the data is beyond the scope of this document.

DELAYED/IMMEDIATE/CHRONIC EFFECTS FROM LONG/SHORT TERM EXPOSURE
No additional test data available.

NUMERICAL MEASURES OF TOXICITY (SUCH AS ATE)
Calculation based on GHS additivity formula

TEST	ROUTE	SPECIES	VALUE	EFFECTS
LD50	Oral	Rat (OECD 401)	1 692.59 mg/kg bw	Refer above section 11.1
LD50	Dermal	Rabbit (OECD 402)	> 2 000 mg/kg bw	Refer above section 11.1

INTERACTIVE EFFECTS
No additional data available.

WHERE SPECIFIC CHEMICAL DATA IS NOT AVAILABLE
No additional data available.

MIXTURES
No additional data available.

MIXTURES VS INGREDIENTS INFORMATION
No additional data available.

OTHER INFORMATION
No additional data available.

SECTION 12 — ECOLOGICAL INFORMATION

TOXICITY
Calculation based on GHS additivity formula

TEST	SPECIES	VALUE
48Hr EC50	Fish	> 100 mg/l
48Hr EC50	Daphnia	> 100 mg/l
48Hr EC50	Algae	> 100 mg/l

PERSISTANCE AND DEGRADEBILITY
Not biodegradable (BOD/TOD test).

BIOACCUMULATIVE POTENTIAL

PARTITION COEFFICIENT: N-OCTANOL/WATER	
LOG-K_{OW}	- 3.86 (derived from EPIWIN/KOWWIN model)

Bioaccumulation in fish or other aquatic species is not expected due to the high-water solubility.

MOBILITY IN SOIL
Not expected to undergo hydrolysis. The substance is not expected to enter the atmosphere significantly due to its high-water solubility.

OTHER ADVERSE EFFECTS
No additional test data available.

SECTION 13 — DISPOSAL CONSIDERATIONS
WASTE DISPOSAL RECOMMENDATION
Dispose of waste and container in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport, or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Recycle/reuse. Remove for physico-chemical/biological treatment. Avoid discharge into drains or the environment.

ECOLOGY – WASTE MATERIAL
DO NOT release to the environment.

EMPTY CONTAINER
Avoid reuse of empty container for other storage. Consider recycling. Rinse/decontaminate thoroughly before re-filling, discarding in waste or return to supplier.

SECTION 14 — TRANSPORT INFORMATION

TRANSPORTATION CLASSIFICATION	ADR/RID	ADN(R)	IMDG	ICAO/IATA
UN NUMBER	Not Regulated			

SECTION 15 — REGULATORY INFORMATION
SA NATIONAL LEGISLATION
Hazardous Substances Act 15 of 1973 and Regulations.
Occupational Health and Safety Act 85 of 1993 and Regulations.
National Environmental Management Act 107 of 1998 and Regulations.

SA NATIONAL STANDARDS
SANS 10228: 2006: Identification and Classification of Dangerous Goods for Transport by Road and Rail.
SANS 10231: 2018: Transport of dangerous goods - Operational requirements for road vehicles.
SANS 10234: 2008: Globally Harmonized System of classification and labelling of chemicals (GHS).
SANS 11014: 2010: Safety Data Sheets for chemical Products.

REACH Regulation (EC) No 1907/2006
This product contains only components that have been either pre-registered, registered, are exempt from registration, are regarded as registered or are not subject to registration according to Regulation (EC) No. 1907/2006 (REACH)., The aforementioned indications of the REACH registration status are provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. It is the buyer´s/user´s responsibility to ensure that his/her understanding of the regulatory status of this product is correct.

Seveso III: Directive 2012/18/EU
Listed in Regulation: Not applicable

Chemical safety assessment
Not assessed.

SECTION 16 — OTHER INFORMATION

FULL TEXT OF H & P - STATEMENTS REFERRED TO UNDER SECTION 2

HAZARD STATEMENTS	PRECAUTIONARY STATEMENTS
H302: Harmful if swallowed. H316: Causes mild skin irritation. H318: Causes serious eye damage.	P264: Wash hands thoroughly after handling. P270: Do not eat, drink, or smoke when using this product. P280: Wear protective gloves/protective clothing/eye protection/face protection. P301+P310: IF SWALLOWED: Immediately call a POISON CENTER/doctor. P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P321: Specific treatment (see IF SWALLOWED, IF IN EYES on this label). P330: Rinse mouth. P405: Store locked up. P501: Dispose of contents and container in accordance with local, regional, national, international regulations.

LABELLING SANS 10234:2008
SIGNAL WORD: DANGER

PICTOGRAMS

PHYSICAL & HEALTH HAZARD		ENVIRONMENTAL HAZARD		TRANSPORT	
GHS05 GHS07	Corrosive Substance Toxic Substance	N/A	N/A	N/A	N/A
					

LEGEND TO ABBREVIATIONS & ACRONYMS

ABEK: Organic gases and vapours (BP>65ºC); Inorganic gases and vapours; Sulphur dioxide and other acid gases and vapours; Ammonia and organic ammonia derivatives
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
BCF: Bioconcentration Factor
BOD5: Biological Oxygen Demand in 5
CAS: Chemical Abstracts Service
CEN: European Committee for Standardization
COD: Chemical Oxygen Demand
DMEL: Derived Minimal Effect Level
DNEL: Derived No Effect Level
EC: European Commission
EC50: Half Maximal Effective Concentration
EMS: Emergency Medical Services
ERG: Emergency Response Guidelines
EU: European Union
GHS: Globally Harmonized System
IARC: International Agency for Research on Cancer
IATA: International Air Transport Association
ICAO: International Civil Aviation Organization
ICSC: International Chemical Safety Cards
IMDG: International Maritime Dangerous Goods
LC50: Lethal Concentration 50 (concentration in water having 50% chance of causing death to aquatic life)
LD50: Lethal Dose 50 (median concentration of a toxicant that will kill 50% of the test animals within a designated period)
LOG-KOW: Logarithm - Octanol - Water Partition Coefficient
NIOSH: National Institute for Occupational Safety and Health (US CDC)
NTP: National Toxicology Program
OEL: Occupational Exposure Limit
OSHA: Occupational Safety and Health Administration

P, B, L & O: Packaging, Bulk Transport, Loading Operation & Transport Operation
PBT: Persistent, Bio accumulative, and Toxic
PNEC: Predicted No-Effect Concentration
PPE: Personal Protection Equipment
RID: European Agreements Concerning the International Carriage of Dangerous Goods by Rail
RTECS: Registry of Toxic Effects of Chemical Substances
SANS: South African National Standard
vPvB: Very Persistent Very Bio accumulative

TRAINING ADVICE

Ensure SDS is always available and provide adequate information, instruction, and training for operators.

COMPILED BY: Aquatrade Water Treatment Chemicals (Pty) Ltd, R. van Rooyen, SHEQ Coordinator

ISSUE DATE	VERSION NUMBER	REVISION	SUPERSEDE DATE
27 November 2023	1	4	01 March 2021
01 March 2021	1	3	08 February 2019
08 February 2019	1	2	20 July 2018
20 July 2018	0	1	4 June 2018
4 June 2018	0	0	Original

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