



1 Identification

GHS Product Identifier

AQT 144

Other means of identification

CAS:	Mixture not listed in registry
EC:	Mixture not listed in registry
RTECS:	Mixture not listed in registry
ICSC:	Mixture
Chemical Family:	Mixture
Synonyms:	Mixture
Proper Shipping Name:	TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S.
Chemical Formula:	Mixture
Product Stock Code/s:	AQT144A(25Kg); AQT144B(200Kg); AQT144C(1000Kg)

Recommended use of the chemical and restriction on use

AQT 144 is a broad spectrum biocide for use in cooling water systems where bacteria and biofilm are expected to be present. It provides micro-organism control and clean systems. It may be used alone or with other biocides on a rotation basis.

Supplier's details

AQUATRADE WATER TREATMENT CHEMICALS (PTY) LTD

12-14 Diesel Road
Isando, Kempton Park
Gauteng, South Africa
1609

PO Box 357
Isando
1600

admin@aquatradesa.co.za

www.aquatradesa.co.za

Tel: +27 11 394 0752

SDS Enquiries only

sheq@aquatradesa.co.za

Tel: +27 87 654 3326

Emergency phone number

E le Sar: +27 82 921 0643 (Available Mon - Fri, GMT 5:00 to 20:00)

Spilltech: +27 86 100 0366 (Available 24/7)

2 Hazard(s) identification

Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Acute Toxicity, Oral (Category 5), H303

Acute Toxicity, Dermal (Category 5), H313

Acute Toxicity, Inhalation (Category 2), H330

Skin Corrosion/Irritation, (Category 1), H314

Serious Eye Damage/Irritation, (Category 1), H318
Aquatic Toxicity - Acute (Category 1), H400

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

GHS label elements

Danger



May be harmful if swallowed

May be harmful in contact with skin

Causes severe skin burns and eye damage

Causes serious eye damage

Fatal if inhaled

Very toxic to aquatic life

Do not breathe dust/fume/gas/mist/vapours/spray.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Use only outdoors or in a well-ventilated area.

Avoid release to the environment.

Wear protective gloves/protective clothing/eye protection/face protection.

Wear respiratory protection.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing. Rinse SKIN with water/shower.

IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a POISON CENTER or doctor/physician.

Specific treatment (see P330+P351+P353 on this label).

Wash contaminated clothing before reuse.

Absorb spillage to prevent material damage.

Collect spillage.

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

Dispose of contents and container in accordance with local, regional, national, international regulations.

Other hazards which do not result in classification

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.

3 Composition/information on ingredients

Description	CAS Number	EINECS Number	%	Note
-------------	------------	---------------	---	------

4 First-aid measures

Description of necessary first-aid measures

Inhalation

Move to fresh air. Give artificial respiration if breathing has stopped. If symptoms persist, call a physician.

Skin contact

IMMEDIATELY get under a safety shower. Remove contaminated clothing. Wash off with soap and water. Immediate medical attention is required. Wash contaminated clothing before reuse. **DO NOT** take clothing home to be laundered. Discard contaminated shoes, belts, and other articles made of leather.

Eye contact

Rinse immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.

Ingestion

Drink 1 or 2 glasses of water. IMMEDIATELY see a physician. **Never** give anything by mouth to an unconscious person.

Most important symptoms/effects, acute and delayed

Aside from the information found under "**Description of first aid measures**" (above) and "**Indication of immediate medical attention and special treatment needed**" (below), any additional important symptoms and effects are described in Section 11: **Toxicology Information**.

Indication of immediate medical attention and special treatment needed, if necessary

Treatment should be directed at preventing absorption, administering to symptoms (if they occur), and providing supportive therapy.

5 Fire-fighting measures

Suitable extinguishing media

Excerpt from ERG Guide 154 [Substances - Toxic and/or Corrosive (Non-Combustible)]

SMALL FIRE

- Dry chemical, CO2 or water spray.

LARGE FIRE

- Dry chemical, CO2, alcohol-resistant foam or water spray.
- Move containers from fire area if you can do it without risk.
- Dike fire-control water for later disposal; do not scatter the material.

FIRE INVOLVING TANKS OR CAR/TRAILER LOADS

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Do not get water inside containers.
- Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from tanks engulfed in fire.

Specific hazards arising from the chemical

Hazardous combustion products:

No data available

Unusual Fire and Explosion Hazards:

Combustion generates toxic fumes of the following: Hydrogen chloride; Nitrogen oxides (NOx); sulfur oxides.

Special protective actions for fire-fighters

Large Fire

- Move containers from fire area if you can do it without risk.
- Dike fire-control water for later disposal; **DO NOT** scatter the material.

Fire involving Tanks or Car/Trailer Loads

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- **DO NOT** get water inside containers.
- Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- **ALWAYS** stay away from tanks engulfed in fire.

Special protective equipment for firefighters

- Wear self-contained breathing apparatus and protective suit.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear a CEN approved (or equivalent) respirator (with organic vapor/acid gas cartridge and a dust/mist filter) during spill clean-ups and deactivation of this material. If exposed to material during clean-up operations, IMMEDIATELY remove all contaminated clothing and wash exposed skin areas with soap and water.

See SECTION 4, First Aid Measures, for further information.

Environmental precautions

DO NOT allow material to contaminate ground water system. Prevent product from entering drains.

Methods and materials for containment and cleaning up

WARNING: KEEP SPILLS AND CLEAN-UP RESIDUALS OUT OF MUNICIPAL SEWERS AND OPEN BODIES OF WATER.

Absorb the spill with spill pillows or inert solids such as clay or vermiculite, and transfer contaminated materials to suitable containers for disposal. Deactivate spill area with freshly prepared solution of 5% sodium bicarbonate and 5% sodium hypochlorite in water.

Apply solution to the spill area at a ratio of 10 volumes deactivation solution per estimated volume of residual spill to deactivate any residual active ingredient. Let stand for 30 minutes. Flush the spill area with copious amounts of water to chemical sewer (if in accordance with local procedures, permits and regulations). **DO NOT** add deactivation solution to the waste pail to deactivate the adsorbed material.

See Section 13, "Disposal Considerations", for information regarding the disposal of contained materials.

7 Handling and storage

Precautions for safe handling

This material is a severe irritant. For personal protection see section 8. **DO NOT** handle material near food, feed or drinking water.

Conditions for safe storage, including any incompatibilities

Keep in a well-ventilated place. The product as supplied may evolve gas (largely carbon dioxide) slowly. To prevent the buildup of pressure the product is packaged in specially vented containers, where necessary. Keep this product in the original container when not in use. Container must be stored and transported in an upright position to prevent spilling the contents through the vent, where fitted.

DO NOT store this material in containers made of the following: Steel. **DO NOT** store this material near food, feed or drinking water.

CONTAINERS MAY BE HAZARDOUS WHEN EMPTY. Since emptied containers retain product residue follow all SDS and label warnings even after container is emptied. Expiration date based only on retention of >95% actives during storage at 20°C - 25°C (68°F - 77°F). Storage temperature: 1°C - 55°C.

SANS 10263-0 Warehousing

8.4.3.2 Where flammable or **corrosive** substances are stored, the floor shall slope away from the storage area (primary collection area) to a secondary catch basin or sump of capacity at least 10 % of the total available storage volume of the fire section concerned. The secondary catch basin shall be within the fire section, and shall be such that it can be well ventilated. Care shall be taken in the design of such areas to prevent contamination of the soil or ground water.

9.7.2 Every type of storage area inside a warehouse shall be clearly demarcated, for example separate storage areas for **poisons**, flammables and **corrosives** shall display the relevant hazard class diamond (see table 1). The dimensions of the hazard class diamonds shall be at least 250 mm x 250 mm.

12.8.5 Storage of flammable liquids of class 3, **toxic** substances of division 6.1 and **corrosives** of class 8

Nitro-methane class 3, UN No. 1261, shall be separated from substances of class 6.1, and cyanides of division 6.1 shall be separated from acids of class 8. Concentrated acids and bases shall be segregated by at least 1 m. Packaged flammable liquids of class 3, **toxic** substances of division 6.1 and **corrosives** of class 8 that are of category 3 can be stored in the same area, provided that

- a) they are kept above floor level, and
- b) liquid dangerous goods of one class are not stored above dangerous goods of another class.

12.8.8.3 **Toxic** and infectious substances (see class 6 in SANS 10228) can contaminate firefighting water in the event of a fire, therefore:

- a) **Toxic** and infectious substances shall be separated from other flammable products and aerosols.
- b) **Toxic** and infectious substances shall be segregated from oxidizing substances, organic peroxides and **corrosives**.
- c) Flammable **toxic** and infectious substances shall be segregated from non-flammable **toxic** and infectious substances.

12.8.8.4 **Corrosives** (see class 8 in SANS 10228) that leak or spill from their packaging can cause serious damage to other packages, with potentially hazardous consequences.

Corrosives shall be segregated from **toxic** substances, infectious substances, aerosols, flammables, oxidizing substances and organic peroxides.

The provisions of above apply to the storage of the following quantities of dangerous goods.

Toxic and infectious substances	
Class 6.1	
Category 1	> 5 kg
Category 2	> 50 kg
Category 3	> 500 kg
Class 6.2	
All quantities	
Corrosives (acids and bases) Class 8	
Category 1	> 50 kg
Category 2	> 200 kg
Category 3	> 1 000 kg

Special Provisions SANS 10263-0

E.2.6.1 Toxic substances of division 6.1 shall **NOT** be stored together with foodstuffs or stock feeds.

8 Exposure controls/personal protection

Control parameters

Occupational exposure limits

Not listed.

Additional exposure limits under the conditions of use

Not available.

DNEL/DMEL and PNEC-Values

Not available.

Appropriate engineering controls

Use local exhaust ventilation with a minimum capture velocity of 0.75 m/sec. (150 ft/min.) at the point of dust or mist evolution. Refer to SANS 10400-O and the current edition of "Industrial Ventilation: A Manual of Recommended Practice" published by the American Conference of Governmental Industrial Hygienists for information on the design, installation, use, and maintenance of exhaust systems.

Protective measures

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Individual protection measures

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 below 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.

Eye/face protection



Face shield (8 inch minimum) and safety glasses or safety goggles. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU). Contact lenses should not be worn as they may contribute to severe eye injury.

Hand 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. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm

Break through time: 480 min

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm

Break through time: 480 min

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves.

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 A1B1E1K1 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).

9 Physical and chemical properties

Physical and chemical properties

Appearance (physical state, colour etc):	Colourless to yellow liquid
Odour:	Aromatic
Odour threshold:	No test data available
pH:	2.5 - 5.0
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 flammable or explosive
Vapour pressure:	No test data available
Vapour density:	No test data available
Relative density:	1.04 - 1.06
Solubility(ies):	Miscible in all proportions
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

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

10 Stability and reactivity

Reactivity

No data available.

Chemical stability

Stable under normal use, storage and transport conditions.

Possibility of hazardous reactions

Product will not undergo polymerization. No hazardous reactions known.

Conditions to avoid

High temperature. Poor ventilation.

Incompatible materials

Avoid contact with the following: Oxidizing agents, Amines, Reducing agents and Mercaptans.

Hazardous decomposition products

Nitrogen oxides (NO_x), Sulphur oxides and hydrogen chloride.

11 Toxicological information

Toxicological (health) effects

Product test data not available. Refer to component data.

COMPONENTS INFLUENCING TOXICOLOGY:

Mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2-Isothiazol-3-one [EC no. 220-239-6] (3:1)

Acute inhalation toxicity:

LC₅₀, Rat, 4 Hour, dust/mist, 0.33 mg/l

Specific Target Organ Systemic Toxicity (Single Exposure)

Evaluation of available data suggests that this material is not an STOT-SE toxicant.

Specific Target Organ Systemic Toxicity (Repeated Exposure)

Excessive exposure may cause irritation to upper respiratory tract (nose and throat).

Carcinogenicity

Did not cause cancer in laboratory animals.

Teratogenicity

Did not cause birth defects or other effects in the fetus even at doses which caused toxic effects in the mother.

Reproductive toxicity

In animal studies, did not interfere with reproduction.

Mutagenicity

In vitro tests did not show mutagenic effects In vivo tests did not show mutagenic effects.

Aspiration Hazard

Aspiration into the lungs may occur during ingestion or vomiting, causing tissue damage or lung injury.

Information on the likely routes of exposure

Skin and eye contact - YES (Vapours/Mist)

Inhalation - YES (Vapours/Mist)

Ingestion - YES (Unhygienic practices)

Symptoms related to the physical, chemical and toxicological characteristics

Refer "Toxicological (health) effects" above.

Delayed and immediate effects and also chronic effects from short and long term exposure

Product test data not available. Refer to component data.

COMPONENTS INFLUENCING TOXICOLOGY:

Mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2Hisothiazol-3-one [EC no. 220-239-6] (3:1)

Inhalation toxicity:

Moderately toxic by inhalation. Inhalation of mist or vapour may cause irritation to the mucous membranes of the respiratory tract.

Skin toxicity:

Moderately toxic if absorbed through the skin. Dermal exposure can cause severe irritation and/or burns characterised by redness, swelling and scab formation. Prolonged skin exposure may cause permanent damage.

Eye Toxicity:

Corrosive. Burns can occur following exposure. Direct contact may cause impairments of vision, corneal damage and/or blindness. Rinsing of the eye should take place immediately.

Ingestion toxicity:

Toxic if swallowed. Irritation and/or burns can occur to the entire gastrointestinal tract, including the stomach and intestines, characterised by nausea, vomiting, diarrhea, abdominal pain, bleeding and/or tissue ulceration or perforation.

Carcinogenicity:

The product did not cause cancer in long-term animal studies.

Reproductive toxicity:

The product has been tested in laboratory animals and there was no evidence of reproductive toxicity.

Developmental toxicity:

The product has been tested in laboratory animals and there was no evidence of developmental toxicity.

Teratogenicity toxicity:

The product has been tested in laboratory animals and there was no evidence of teratogenicity toxicity.

Inhalation:

There are no known or reported effects from chronic exposure except for effects similar to those experienced from acute exposure.

Skin contact:

Repeated dermal exposure may cause tissue destruction due to the corrosive nature of this product damage.

Eye contact:

Prolonged contact may result in permanent damage. Corneal involvement or visual impairment is expected.

Ingestion:

There are no known or reported effects from chronic ingestion except for effects similar to those experienced from single exposure. The acute corrosivity of this product makes chronic ingestion of significant accounts unlikely.

Sensitization:

The product tested positive for skin sensitization in humans and laboratory animals. Repeated or prolonged skin contact may cause some individuals to develop skin rash and other skin complications due to allergic skin sensitization.

Specific target organ toxicity - single exposure:

No data available.

Specific target organ toxicity - repeated exposure:

The product is corrosive to all tissues contacted and upon inhalation, may cause irritation to mucous membranes and respiratory tract.

Aspiration hazard:

Aspiration into the lungs may occur during ingestion or vomiting, causing tissue damage or lung injury.

Numerical measures of toxicity (such as acute toxicity estimates)

Acute toxicity		Category
LD ₅₀ Oral Rat	2 285 mg/kg	5
LD ₅₀ Dermal	3 300 mg/kg	5
LC ₅₀ Inhalation	1.65 mg/kg	2

Interactive effects

No additional data available.

Where specific chemical data are not available

No additional data available.

Mixtures

No additional data available.

Mixture versus ingredient information

No additional data available.

Other information

No additional data available.

12 Ecological information**Toxicity**

Acute toxicity		Category
EC ₅₀ Fish	0.95 mg/l	1
EC ₅₀ Daphnia	0.02 mg/l	1
EC ₅₀ Algae	0.8 mg/l	1
EC ₅₀ Micro-organism	No data	

Persistence and degradability

For active ingredient (≤ 15% of mixture) refer below data.

Mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2Hisothiazol-3-one [EC no. 220-239-6] (3:1)

Biodegradability

Considered to be rapidly degradable. Material is not readily biodegradable according to OECD/EEC guidelines.

Biodegradation

< 50 % Exposure time: 10 d Photodegradation Atmospheric half-life: 0.38 - 1.3 d

Bioaccumulative potential

For active ingredient ($\leq 15\%$ of mixture) refer below data.

Bioaccumulation

5-Chloro-2-methyl-4-isothiazolin-3-one (CMIT): 2-Methyl-4-isothiazolin-3-one (MIT):

Partition coefficient n-octanol/water(log Pow)

0.401

Measured Partition coefficient: noctanol/water(log Pow)

-0.486 Measured

Mobility in soil

For active ingredient ($\leq 15\%$ of mixture) refer below data.

Mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2Hisothiazol-3-one [EC no. 220-239-6] (3:1)

Potential for mobility in soil is very high (Koc between 0 and 50).

Given its very low Henry's constant, volatilization from natural bodies of water or moist soil is not expected to be an important fate process.

Partition coefficient (Koc)

28 Estimated.

Other adverse effects

For active ingredient ($\leq 15\%$ of mixture) refer below data.

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.

Mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2Hisothiazol-3-one [EC no. 220-239-6] (3:1)

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

13 Disposal considerations

Disposal methods

Waste disposal recommendations

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. **DO NOT** discharge into drains or the environment.

Ecology - waste materials





DO NOT release to the environment.

Empty Container

DO NOT reuse container. Consider re-filling. Rinse/Decontaminate thoroughly before re-filling, discarding in waste or return to supplier. Puncture container before discarding as waste.

14 Transport information

UN Number

TRANSPORTATION CLASSIFICATION	ADR/RID	ADN(R)	IMDG	ICAO/IATA
Identification Number	2927	2927	2927	2927
Proper Shipping Name	TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S.	TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S.	TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S.	TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S.
Transport Hazard Class(es)	6.1(8) 	6.1(8) 	6.1(8) 	6.1(8) 
Packing Group	II	II	II	II
Environmental Hazards	Yes	Yes	Yes	Yes
Marine Pollutant	No	No	No	No
Emergency Response	ERG: 154	N/A	EMS: F-A, S-B	ERG DRILL GUIDE: 6C
Special provisions Exempt Quantity or Quantity Limitations	Road 50Kg F: 20 Passenger Rail - 1L	Passenger -1L Cargo - 30L	-	Passenger -1L Cargo - 30L
Vessel Stowage Location 10(A) & Requirements 10(B)	-	-	10(A) - B 10(B) - 40	-

UN Proper Shipping Name

Refer table above in section 14.1 UN Number

Transport hazard class(es)

Refer table above in section 14.1 UN Number

Packing group, if applicable

Refer table above in section 14.1 UN Number

Environmental hazards

Acute Aquatic Toxicity Category 1. **DO NOT** discharge or allow into the environment. Keep away from open water sources. Refer table above in section 14.1 UN Number.

Special precautions for user

DO NOT load with Class 1 and 2.3.

May be loaded with Class 2.1, 2.2, 5.1, 6.1, 6.2 and 8B if kept at least 1 metre apart.

Can be loaded with all other classes.

Goods of different classes **must** be segregated by an air space of at least 100mm or by an approved segregation device or non-dangerous goods.

P, B, L and O provisions as per SANS 10231:2018

L13 If any substance has leaked and spilt in a vehicle or container, the vehicle or container may not be re-used until after it has been thoroughly cleaned and, if necessary, disinfected or decontaminated. Any other goods and articles carried in the same vehicle or container shall be examined for possible contamination.

L28 Packages shall not be loaded together with packages known to contain foodstuffs, other articles of consumption or animal feeds.

O9 During the carriage of these substances, stops for service requirements shall be as far as possible from inhabited

or frequented places. A longer stop near such places is permissible only with the consent of the local emergency services.

O19 The provisions in 5.3.4 concerning the supervision of vehicles shall apply when the total mass of these substances in the vehicle exceeds 5000 kg.

5.3.4

A vehicle that carries dangerous goods shall be under constant supervision while stopped or parked if one or both of the following applies:

- a) the dangerous goods carried have an exempt quantity of 10 kg or 10 L, or less; or
- b) any one or more of special provisions O14 to O20 (inclusive) in C.5 applies.

GUIDE 154: SUBSTANCES - TOXIC AND/OR CORROSIVE (NON-COMBUSTIBLE)

Public Safety

CALL Emergency Response Telephone Number 112 or 10177. As an immediate precautionary measure, isolate spill or leak area in all directions for at least 50 meters (150 feet) for liquids and at least 25 meters (75 feet) for solids. Keep unauthorized personnel away. Stay upwind. Keep out of low areas. Ventilate enclosed areas.

Protective Clothing

Wear positive pressure self-contained breathing apparatus (SCBA). Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide little or no thermal protection. Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible.

Evacuation

Fire - If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

Fire

Small fires - Dry chemical, CO₂ or water spray. Large fires: Dry chemical, CO₂, alcohol-resistant foam or water spray. Move containers from fire area if you can do it without risk. Dike fire control water for later disposal; do not scatter the material.

Fire involving tanks or car/trailer loads - Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. **DO NOT** get water inside containers. Cool containers with flooding quantities of water until well after fire is out. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank. ALWAYS stay away from tanks engulfed in fire.

Spill or Leak

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). **DO NOT** touch damaged containers or spilled material unless wearing appropriate protective clothing. Stop leak if you can do it without risk. Prevent entry into waterways, sewers, basements or confined areas. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. **DO NOT** GET WATER INSIDE CONTAINERS.

First Aid

Move victim to fresh air. Call 911 or emergency medical service. Give artificial respiration if victim is not breathing. **DO NOT** use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Administer oxygen if breathing is difficult. Remove and isolate contaminated clothing and shoes. In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes. For minor skin contact, avoid spreading material on unaffected skin. Keep victim warm and quiet. Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable.

15 Regulatory information

Safety, health and environmental regulations specific for the product in question

SA NATIONAL LEGISLATION

Hazardous Substances Act 15 of 1973 and Regulations.
Occupational Health and Safety Act 85 of 1993 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.

16 Other information

Other information

Full text of H & P - Statements referred to under section 2

Hazard statements

H303	May be harmful if swallowed.
H313	May be harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H330	Fatal if inhaled.
H400	Very toxic to aquatic life.

Precautionary statements

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264	Wash thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P284	Wear respiratory protection.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing. Rinse SKIN with water/shower.
P304+P340	IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor/physician.
P321	Specific treatment (see P330+P351+P353 on this label).
P363	Wash contaminated clothing before reuse.

P390 Absorb spillage to prevent material damage.
 P391 Collect spillage.
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.
 P405 Store locked up.
 P501 Dispose of contents and container in accordance with local, regional, national, international regulations.

Labelling REGULATION (EC) No 1272/2008

Signal Word

Danger

Pictograms Hazard to Human

GHS05 Corrosive hazard
 GHS06 Toxic hazard
 GHS09 Environmental hazard

Pictogram Hazard during Transport

Class 6.1 Toxic substance
 Class 8 Corrosive substance

Training advice

Provide adequate information, instruction and training for operators.

Compiled by Aquatrade Water Treatment Chemicals, R. van Rooyen, SHEQ Coordinator.

MANUFACTURER/SUPPLIER DISCLAIMER:

IMPORTANT: This information is given without a warranty or guarantee. No suggestions for use are intended or shall be construed as a recommendation to infringe any existing patents or violate any national or local laws. Safe handling and use is the responsibility of the customer. Read the label before using this product. This information is true and accurate to the best of our knowledge.

Revision History

Revision	Date	Change
1.0	2021/08/06	Preparation of the safety data sheet according to SANS 11014:2010