



1 Identification

GHS Product Identifier

AQT 211

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
Chemical Family:	Organic phosphate and acrylic based polymer
Synonyms:	None
Proper Shipping Name:	Not regulated for transport
Chemical Formula:	Mixture

Recommended use of the chemical and restriction on use

AQT 211 is a phosphonate/polymer/sequestrant blend designed to reduce scale formation and fouling in boiler systems. It has been formulated to remove existing calcium carbonate scale over a period of time. Industrial water treatment.

Supplier's details

AQUATRADE WATER TREATMENT CHEMICALS (PTY) LTD

4A Spanner Road PO Box 357
Spartan, Kempton Park Isando
Gauteng, South Africa Gauteng, South Africa
1619 1600
www.aquatradesa.co.za Tel: +27 11 394 0752
sheq@aquatradesa.co.za Tel: +27 87 654 3326 (SDS Enquiries)

Emergency phone number

E le Sar: +27 82 921 0643 (Available Mon - Fri, GMT 5:00 to 20:00)
Spilltech: +27 861 000 366 (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
Skin Corrosion/Irritation (Category 1B), H314
Serious Eye Damage/Irritation (Category 1), H318

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

GHS label elements

Danger



May be harmful if swallowed

Causes severe skin burns and eye damage

Causes serious eye damage

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

Wash thoroughly after handling.

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

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
Confidential Business Information			0	Information available to Emergency Responders on Tel: +27 82 921 0643

4 First-aid measures

Description of necessary first-aid measures

Eyes

Immediately flush with cold water for at least 15 minutes. Seek medical attention.

Skin

Wash skin with plenty of water. If irritation/rash occurs, get medical attention.

Ingestion

If swallowed: Drink large amounts of water. **DO NOT** induce vomiting. **NEVER** GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. Get medical attention immediately. Treat symptomatically.

Inhalation

If symptoms noticed due to inhalation: Remove to fresh air. If breathing is difficult, have trained person administer oxygen. If not breathing, give artificial respiration. Call a physician immediately.

Most important symptoms/effects, acute and delayed

No data except those symptoms of serious skin burns and eye damage if in contact.

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

Treat symptomatically and supportively.

5 Fire-fighting measures

Suitable extinguishing media

Dry chemical, CO₂, alcohol-resistant foam or water spray.

Specific hazards arising from the chemical

General Hazard

In large fires fuelled by other materials, this product may burn.

Products of Combustion

CO₂, CO.

Explosion Hazards

None known

Special protective actions for fire-fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

All personnel involved in spill cleanup should follow good industrial hygiene practices and **avoid** skin and eye contact by wearing appropriate personal protective equipment. Standard procedure should always be to evacuate all personnel not involved in spill cleanup and cordon off area.

Environmental precautions

Avoid spill to enter open water sources or municipal sewer system.

Methods and materials for containment and cleaning up

Safely stop source of spill. Restrict non-essential personnel from area.

Small spill

Absorb with inert material and place in waste receptacle. Rinse contaminated area.

Large spill

Absorb with inert material and place in waste receptacle. Rinse contaminated area to drain system.

7 Handling and storage

Precautions for safe handling

DO NOT mix with other chemicals. Prevent contact with skin and eyes.

Conditions for safe storage, including any incompatibilities

Keep this product in original closed container in cool area away from heat and strong oxidising agents. **DO NOT** store in mild steel containers unless suitably lined.

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

Avoid spraying the material. Supply safety shower and eyewash in immediate vicinity of exposure area. **Avoid** contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

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

Safety glasses with side shields 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.

Skin 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

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm

Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374

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

No respiratory protection required. For nuisance protection use EN 149:2001 disposable moulded respirators. 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):	Clear Colourless to yellow or pink liquid
Odour:	
Odour threshold:	No test data available
pH:	4.0 - 6.0
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 explosive
Vapour pressure:	No test data available
Vapour density:	No test data available
Relative density:	1.23 - 1.25

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

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

10 Stability and reactivity

Reactivity

No known reactivity profile.

Chemical stability

This product is stable under normal conditions of handling, storage and transport.

Possibility of hazardous reactions

Hazardous polymerisation will not occur under normal conditions.

Conditions to avoid

High temperature. Poor ventilation.

Incompatible materials

Avoid contact with strong oxidising and reducing agents. **Avoid** contact with all other chemicals. Corrosive to copper, mild steel, zinc and aluminium.

Hazardous decomposition products

Carbon oxides, CO₂ & CO.

11 Toxicological information

Toxicological (health) effects

Eyes

This product is corrosive to eyes.

Skin

The primary skin irritation index is unknown but the product is considered corrosive to skin.

Ingestion

Unknown

Carcinogenicity

The constituents of this product are not listed as carcinogens by IARC, NTP or OSHA.

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

No data except those symptoms of serious skin burns and eye damage if in contact.

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

No additional data for product.

Numerical measures of toxicity (such as acute toxicity estimates)

Acute toxicity:		Category:
LD ₅₀ Oral Rat	2 801.52 mg/kg	5
LD ₅₀ Dermal	> 5 000 mg/kg	Not classifiable

LC ₅₀ Inhalation	No data	
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Interactive effects

No additional data for product.

Where specific chemical data are not available

No additional data for product.

Mixtures

No additional data for product.

Mixture versus ingredient information

No additional data for product.

Other information

No additional data for product.

12 Ecological information

Toxicity

Acute toxicity		Category
EC ₅₀ Fish	> 100 mg/l	Not classifiable
EC ₅₀ Daphnia	> 100 mg/l	Not classifiable
EC ₅₀ Algae	No data	
EC ₅₀ Micro-organism NOEC (30 Days)	> 200 mg/l	Not classifiable

Persistence and degradability

At least partially biodegradable with no known toxic degradation products.

Bioaccumulative potential

No test data for product.

Mobility in soil

No test data for product.

Other adverse effects

No test data for product.

13 Disposal considerations

Disposal methods

Waste disposal recommendations

At the time of review, criteria for land treatment or burial (sanitary landfill) disposal practices are subject to significant revision. Prior to implementing land disposal of waste residue (including waste sludge), consult with environmental regulatory agencies for guidance on acceptable disposal practices.

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

Avoid release to the environment.

Empty Container

Avoid reuse of container. Consider refilling. Rinse/Decontaminate thoroughly before discarding in trash or return to supplier.

14 Transport information

UN Number

Not regulated for transport.

UN Proper Shipping Name

Not regulated for transport.

Transport hazard class(es)

Not regulated for transport.

Packing group, if applicable

Not regulated for transport.

Environmental hazards

Not regulated for transport.

Special precautions for user

None except those in sections 4 to 8.

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

H314 Causes severe skin burns and eye damage
H318 Causes serious eye damage.

Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P264 Wash thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face 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.
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

Pictogram Hazard during Transport

None

Acronyms

CAS Chemical Abstract Service
DMEL Derived Minimum Effect Level
DNEL Derived No-Effect Level
EINECS European Inventory of Existing Commercial Chemicals
ICSC International Chemical Safety Cards
PNEC Predicted No-Effect Concentration
RTECS Registry of Toxic Effects of Chemical Substances

Training advice

Provide adequate information, instruction and training for operators.

Compiled by Aquatrade Water Treatment Chemicals (Pty) Ltd, R. van Rooyen, SHEQ Co-ordinator and E. Le Sar, Director.

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	2019/04/02	Preparation of the safety data sheet according to Regulation (EC) No 1907/2006 of the European Parliament and of the Council

