



1 Identification

GHS Product Identifier

AQT 920

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:	Mixture
Synonyms:	None
Proper Shipping Name:	Not regulated for transport
Chemical Formula:	Mixture

Recommended use of the chemical and restriction on use

AQT 920 is a phosphonate/polymer/surfactant blend designed to reduce scale formation and fouling in cooling water systems. Industrial Water Treatment. Not for food, drug or household use.

Supplier's details

AQUATRADE WATER TREATMENT CHEMICALS (PTY) LTD

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Tel: +27 11 394 0752
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 - Inhalation (Category 5), H333
Skin Corrosion/Irritation (Category 2), H315
Serious Eye Damage/Irritation (Category 1), H318
Acute Aquatic Toxicity (Category 2), H401

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

GHS label elements

Danger



Causes skin irritation

Causes serious eye damage

May be harmful if inhaled

Toxic to aquatic life

Wash thoroughly after handling.

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

IF ON SKIN: Wash with plenty of soap and water.

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 P351+P352 on this label).

If skin irritation occurs: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

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 wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

Skin

Wash skin with plenty of soap and water. Immediately call a poison center or doctor/physician.

Ingestion

Rinse mouth with water. Immediately after ingestion: give lots of water to drink. **DO NOT** induce vomiting. **DO NOT** give activated charcoal. **DO NOT** give chemical antidote. Immediately consult a doctor/medical service. Call Poison Information Centre). Take the container/vomit to the doctor/hospital. Ingestion of large quantities: immediately to hospital. Rinse mouth. **DO NOT** induce vomiting. Immediately call a poison center or doctor/physician.

Inhalation

Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician.

Most important symptoms/effects, acute and delayed

Eyes

Causes skin irritation.

Skin

Cause serious eye damage.

Ingestion

Burns to the gastric/intestinal mucosa. Possible esophageal perforation. There is a risk of damage to the blood (methemoglobinemia) after ingestion.

Inhalation

Exposure to high concentrations: Dry/sore throat. Coughing. Irritation of the respiratory tract. Irritation of the nasal mucous membranes.

Following symptoms may appear later: Possible laryngeal spasm/oedema. Risk of lung edema. Respiratory difficulties.

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

Get immediate medical attention if any contact, swallowing or inhalation of product after initial first aid measures. Treat symptomatically.

5 Fire-fighting measures

Suitable extinguishing media

Dry chemical, CO₂, alcohol-resistant foam or water spray. **DO NOT** use direct water jet.

Specific hazards arising from the chemical

General Hazard

In large fire fuelled by other materials this product may burn.

Hazardous combustion products

CO₂, CO, NO_x

Unusual Fire and 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.

Environmental precautions

Prevent further leakage or spillage if safe to do so. **DO NOT** let product enter drains. Discharge into the environment must be avoided.

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 sewer drain system.

7 Handling and storage

Precautions for safe handling

DO NOT mix with other chemicals. Prevent contact with skin and eyes. Avoid inhalation of vapour or mist. Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

Conditions for safe storage, including any incompatibilities

Technical measures

Comply with applicable regulations.

Storage conditions

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.

Incompatible products

Strong oxidising agents.

Incompatible materials

Sources of ignition. Direct sunlight.

Storage temperature

> 15 °C

Heat-ignition

KEEP SUBSTANCE AWAY FROM: heat sources.

Prohibitions on mixed storage

KEEP SUBSTANCE AWAY FROM: combustible materials. strong oxidising agents and metals.

Storage area

Store in a dry area. Keep container in a well-ventilated place. Keep locked up. Protect against frost. Provide for a tub to collect spills. Unauthorized persons are not admitted. Meet the legal requirements.

Special rules on packaging

SPECIAL REQUIREMENTS: Dry, clean and correctly labelled meeting the legal requirements. Secure fragile packagings in solid containers.

Packaging materials

SUITABLE MATERIAL: Stainless steel, nickel, polyethylene, polypropylene, glass and stoneware/porcelain. MATERIAL TO AVOID: Mild steel unless suitably lined.

SANS 10263-0 Warehousing

No provisions.

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.



Eye/face protection

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).

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. This recommendation 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.

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:

Generally no respiratory protection required. For nuisance protection use EN 149:2001 FFP disposable moulded particle respirators.

9 Physical and chemical properties

Physical and chemical properties

Appearance (physical state, colour etc):	Clear colourless liquid
Odour:	No recognisable odour
Odour threshold:	No test data available
pH:	3.5 - 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:	1.06 - 1.09
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 known reactivity.

Chemical stability

Stable under normal operating conditions.

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.

Hazardous decomposition products

CO₂, CO, NO, NO₂

11 Toxicological information

Toxicological (health) effects

Acute Toxicity Oral

Exposure to high concentrations: There is a risk of damage to the blood (methemoglobinemia) after ingestion.

Acute Toxicity Inhalation

Exposure to high concentrations: Dry/sore throat. Coughing. Irritation of the respiratory tract. Irritation of the nasal mucous membranes.

Following symptoms may appear later: Possible laryngeal spasm/oedema. Risk of lung edema. Respiratory difficulties.

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/irritation

Cause serious eye damage.

Respiratory or skin sensitization

Not classified. Based on available data, the classification criteria are not met.

Germ cell mutagenicity

Not classified. Based on available data, the classification criteria are not met.

Carcinogenicity

Not classified. Based on available data, the classification criteria are not met.

Reproductive toxicity

Not classified. Based on available data, the classification criteria are not met.

Specific target organ toxicity – single exposure:

Not classified. Based on available data, the classification criteria are not met.

Specific target organ toxicity – repeated exposure

Not classified. Based on available data, the classification criteria are not met.

Aspiration hazard

Not classified. Not an aerosol/mist.

Information on the likely routes of exposure

Skin and eye contact - YES (Mist/Vapour)

Inhalation - YES (Vapour)

Ingestion - YES (Unhygienic practices)

Symptoms related to the physical, chemical and toxicological characteristics

Acute Toxicity Oral

Exposure to high concentrations: There is a risk of damage to the blood (methemoglobinemia) after ingestion.

Acute Toxicity Inhalation

Exposure to high concentrations: Dry/sore throat. Coughing. Irritation of the respiratory tract. Irritation of the nasal mucous membranes.
Following symptoms may appear later: Possible laryngeal spasm/oedema. Risk of lung edema. Respiratory difficulties.

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/irritation

Cause serious eye damage.

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

Symptoms/effects after inhalation

EXPOSURE TO HIGH CONCENTRATIONS: Dry/sore throat. Coughing. Irritation of the respiratory tract. Irritation of the nasal mucous membranes.

FOLLOWING SYMPTOMS MAY APPEAR LATER: Possible laryngeal spasm/oedema. Risk of lung edema. Respiratory difficulties.

Symptoms/effects after skin contact

Irritation of the skin.

Symptoms/effects after eye contact

Corrosion of the eye tissue. Causes serious eye damage.

Symptoms/effects after ingestion

EXPOSURE TO HIGH CONCENTRATIONS: Vomiting. Diarrhoea. Burns to the gastric/intestinal mucosa. Possible esophageal perforation. Bleeding of the gastrointestinal tract. Shock. Disturbances of consciousness.

Numerical measures of toxicity (such as acute toxicity estimates)

Acute toxicity		Category
LD ₅₀ Oral Rat	>5 000 mg/kg	Not classifiable
LD ₅₀ Dermal	>5 000 mg/kg	Not classifiable
LC ₅₀ Inhalation	638.7 mg/kg	5

Interactive effects

None known.

Where specific chemical data are not available

No data available.

Mixtures

No data available.

Mixture versus ingredient information

No data available.

Other information

None.

12 Ecological information

Toxicity

Acute toxicity		Category
EC ₅₀ Fish	88.14 mg/l	3
EC ₅₀ Daphnia	5.64 mg/l	2
EC ₅₀ Algae	> 100 mg/l	Not classifiable
EC ₅₀ Micro-organism	8.9 mg/l	2

Persistence and degradability

No test data available.

Bioaccumulative potential

No test data available.

Mobility in soil

No test data available.

Other adverse effects

None known.

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

Avoid release to the environment.

Empty Container

DO NOT reuse container. Consider refilling. Rinse/decontaminate thoroughly before discarding in chemical waste 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

Acute aquatic toxicity, Category 2. **Avoid** discharge into the environment or open water sources.

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

H315	Causes skin irritation.
H318	Causes serious eye damage.
H333	May be harmful if inhaled.
H401	Toxic to aquatic life.

Precautionary statements

P264	Wash thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P310	Immediately call a POISON CENTER or doctor/physician.
P321	Specific treatment (see P351+P352 on this label).

Labelling REGULATION (EC) No 1272/2008

Signal Word

Danger

Pictograms Hazard to Human

GHS05 Corrosive Hazard

Pictogram Hazard during Transport

None

Acronyms:

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstract Service
EC	Effective Concentration
EINECS	European Inventory of Existing Commercial Chemical Substances
ICSC	International Chemical Safety Cards
LC	Lethal Concentration
LD	Lethal Dose
NFPA	National Fire Protection Agency
(USA) NIOSH	National Institute for Occupational Safety and Health
(USA) OSHA	Occupational Safety and Health Administration

(USA) PEL Permissible Exposure Limit
REL Recommended Exposure Limit
RTECS Registry of Toxic Effects of Chemical Substances
TWA Time-Weighted Average

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	2019/04/08	Preparation of the safety data sheet according to SANS 11014:2010