

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Issue date: 4/11/2022 Revision date: 24/05/2023 Supersedes version of: 29/09/2020 Version: 2.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture

 Product name
 : AQUATREAT® 698

 UFI
 : PV00-60EY-K000-FQPG

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Use of the substance/mixture : Product for boiler water treatment

| Title | Use descriptors |
|--|--|
| Industrial use of water treatment products | SU0, SU3, SU5, SU22, SU23, PC37, PROC2, PROC4, PROC8a, PROC8b, PROC9, ERC4, ESVOC SPERC 3.22a.v1 |

Full text of use descriptors: see section 16

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

International Aquatreat company bvba
Industrial Zone B 122 - Nieuwlandlaan 40/42
3200 AARSCHOT
Belgium
T 132 (0)16 563121

T +32 (0)16 562121

aquatreat@aquatreat.be - www.aquatreat.eu

1.4. Emergency telephone number

| Country | Official advisory body | Address | Emergency number | Comment |
|---------|--|---------------------|------------------|---|
| Belgium | Centre Anti-Poisons/Antigifcentrum c/o Hôpital Militaire Reine Astrid | Rue Bruyn 1 1120 | +32 70 245 245 | Please dial: 070 245 245 for any urgent questions about intoxication (free of charge 24/7), if not accessible, dial: 02 264 96 30 (standard fee) |

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute toxicity (oral), Category 4

Acute toxicity (inhalation:vapour) Category 4

Skin corrosion/irritation, Category 1, Sub-Category 1A

Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation

Specific target organ toxicity – Repeated exposure, Category 2

Hazardous to the aquatic environment – Chronic Hazard, Category 3

Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

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2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



CLP Signal word : Danger

Contains : 2-aminoethanol; ethanolamine

Hazard statements (CLP) : H302+H332 - Harmful if swallowed or if inhaled.

H314 - Causes severe skin burns and eye damage.

H335 - May cause respiratory irritation.

H373 - May cause damage to organs through prolonged or repeated exposure.

H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements (CLP) : P273 - Avoid release to the environment.

P280 - Wear protective gloves/protective clothing/eye protection/face protection. 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.

P312 - Call a POISON CENTER or doctor/physician if you feel unwell. P403+P233 - Store in a well-ventilated place. Keep container tightly closed.

EUH-statements : EUH031 - Contact with acids liberates toxic gas.

2.3. Other hazards

Other hazards which do not result in classification : None.

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|--|--|--------|--|
| sodium hydrogensulphite %; sodium bisulphite % | CAS-No.: 7631-90-5 EC-No.: 231-548-0 EC Index-No.: 016-064-00-8 REACH-no: 01-2119524563- 42-0000 | < 25 | Acute Tox. 4 (Oral), H302 |
| 2-aminoethanol; ethanolamine | CAS-No.: 141-43-5 EC-No.: 205-483-3 EC Index-No.: 603-030-00-8 REACH-no: 01-2119486455- 28-0000 | 5 – 10 | Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Skin Corr. 1B, H314 |

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| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|-------------------------------------|---|--------|--|
| 2,2'-iminodiethanol; diethanolamine | CAS-No.: 111-42-2 EC-No.: 203-868-0 EC Index-No.: 603-071-00-1 REACH-no: 01-2119488930- 28-0000 | 5 – 10 | Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT RE 2, H373 Aquatic Chronic 3, H412 |

| Specific concentration limits: | | |
|--------------------------------|---|-------------------------------|
| Name | Product identifier | Specific concentration limits |
| 2-aminoethanol; ethanolamine | CAS-No.: 141-43-5 EC-No.: 205-483-3 EC Index-No.: 603-030-00-8 REACH-no: 01-2119486455- 28-0000 | (5 ≤C ≤ 100) STOT SE 3, H335 |

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Move the person to fresh air.
First-aid measures after skin contact : Wash immediately with lots of water.

First-aid measures after eye contact : Wash immediately with lots of water (15 minutes).

First-aid measures after ingestion : Immediately after ingestion: give lots of water to drink. Seek medical advice immediately.

4.2. Most important symptoms and effects, both acute and delayed

No additional information available

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Powder. Foam. Water. Unsuitable extinguishing media : Not specified.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

No additional information available

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Protective clothing.

6.1.1. For non-emergency personnel

No additional information available

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6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Plug the leak, cut off the supply. Prevent soil and water pollution.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Clean contaminated surfaces with an excess of water.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Keep packing tightly closed.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container in a well ventilated place. Store away from freezing (avoid freezing during

storage).

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

No additional information available

8.2.2. Personal protection equipment

Personal protective equipment:

Protective clothing. Gloves. Safety glasses.

Personal protective equipment symbol(s):







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8.2.2.1. Eye and face protection

Eye protection:

Protective goggles

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable gloves, resistant to chemicals

Hand protection:

Gloves

8.2.2.3. Respiratory protection

No additional information available

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

No additional information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Colour : Colourless. light yellow.

Appearance Clear. Amine-like. Odour Not available Odour threshold : -5 °C Melting point : Not available Freezing point Boiling point : > 100 °C Flammability : Not available **Explosive limits** : Not available Lower explosion limit : Not available Upper explosion limit : Not available Flash point : > 90 °C Auto-ignition temperature : Not available Decomposition temperature : Not available рΗ : 10,8 (9,8 – 11,8) Viscosity, kinematic : Not available

Solubility : Water solubility: 100%.

Water: Completely soluble

Partition coefficient n-octanol/water (Log Kow) : Not available Vapour pressure : Not available Vapour pressure at 50°C : Not available Density : Not available Relative density : 1,12 (1,10 – 1,14) Relative vapour density at 20°C : Not available Particle characteristics : Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

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SECTION 10: Stability and reactivity

10.1. Reactivity

Heating up due to reaction with acids is possible.

10.2. Chemical stability

No additional information available

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

(strong) acids.

LD50 oral rat

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Harmful if swallowed.
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Harmful if inhaled.

| AQUATREAT® 698 | |
|-----------------------------|---------------|
| LD50 oral rat > 10000 mg/kg | |
| LD50 dermal rat | > 20000 mg/kg |
| ATE CLP (vapours) | 11 mg/l/4h |

2-aminoethanol; ethanolamine (141-43-5)

Skin corrosion/irritation : Causes severe skin burns.

Skin corrosion/irritation . Gauses severe skin burns.

pH: 10.8 (9.8 - 11.8)Serious eye damage/irritation : Assumed to cause serious eye damage

pH: 10,8 (9,8 – 11,8)

1089 mg/kg

Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified

STOT-single exposure : May cause respiratory irritation.

STOT-repeated exposure : May cause damage to organs through prolonged or repeated exposure.

2,2'-iminodiethanol; diethanolamine (111-42-2)

STOT-repeated exposure May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

11.2. Information on other hazards

No additional information available

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SECTION 12: Ecological information

12.1. Toxicity

Ecology - water : Readily biodegradable in water

Hazardous to the aquatic environment, short-term : Not classified

(acute)

Hazardous to the aquatic environment, long-term : Harmful to aquatic life with long lasting effects.

(chronic)

| AQUATREAT® 698 | | |
|--|-----------------|--|
| LC50 - Fish [1] | > 600 mg/l | |
| EC50 - Crustacea [1] 30-300 mg/l (48h) | | |
| 2-aminoethanol; ethanolamine (141-43-5) | | |
| LC50 - Fish [1] 170 mg/l | | |
| 2,2'-iminodiethanol; diethanolamine (111-42-2) | | |
| LC50 - Fish [1] | 1430 mg/l (96h) | |

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Ecology - waste materials : Do not discharge into drains or the environment. Refer to manufacturer/supplier for

information on recovery/ recycling.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

14.1. UN number or ID number

 UN-No. (ADR)
 : UN 3267

 UN-No. (IMDG)
 : UN 3267

 UN-No. (IATA)
 : Not applicable

 UN-No. (ADN)
 : Not applicable

 UN-No. (RID)
 : Not applicable

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14.2. UN proper shipping name

Proper Shipping Name (ADR) : corrosive liquid, basic, organic, n.o.s., (mixture of monoethanolamine en diethanolamine), 8,

II, (E)

Proper Shipping Name (IMDG) : corrosive liquid, basic, organic, n.o.s., (mixture of monoethanolamine en diethanolamine), 8,

III, (E)

Proper Shipping Name (IATA) : Not applicable
Proper Shipping Name (ADN) : Not applicable
Proper Shipping Name (RID) : Not applicable

Transport document description (ADR) : UN 3267 corrosive liquid, basic, organic, n.o.s., (mixture of monoethanolamine en

diethanolamine), 8, III, (E), III

Transport document description (IMDG) : UN 3267 corrosive liquid, basic, organic, n.o.s., (mixture of monoethanolamine en

diethanolamine), 8, III, (E), III

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : 8
Danger labels (ADR) : 8



IMDG

Transport hazard class(es) (IMDG) : 8
Danger labels (IMDG) : 8



IATA

Transport hazard class(es) (IATA) : Not applicable

ADN

Transport hazard class(es) (ADN) : Not applicable

RID

Transport hazard class(es) (RID) : Not applicable

14.4. Packing group

Packing group (ADR) : III
Packing group (IMDG) : III

Packing group (IATA) : Not applicable
Packing group (ADN) : Not applicable
Packing group (RID) : Not applicable

14.5. Environmental hazards

Dangerous for the environment : No Marine pollutant : No

Other information : No supplementary information available

14.6. Special precautions for user

Overland transport

Hazard identification number (Kemler No.) : 80

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Orange plates

80 3267

Transport by sea

No data available

Air transport

Not applicable

Inland waterway transport

Not applicable

Rail transport

Not applicable

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

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15.1.2. National regulations

France

| Occupational diseases | |
|-----------------------|--|
| Code | Description |
| RG 49 | Skin disorders caused by aliphatic, alicyclic amines or ethanolamines |
| RG 49 BIS | Respiratory disorders caused by aliphatic amines, ethanolamines or isophoronediamine |
| RG 66 | Occupational rhinitis and asthma |

Germany

Water hazard class (WGK) : WGK 2, Significantly hazardous to water (Classification according to AwSV, Annex 1).

Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

ABM category : A(4) - low hazard for aquatic organisms, may have longterm hazardous effects in aquatic

environment

SZW-lijst van kankerverwekkende stoffen : None of the components are listed

SZW-lijst van mutagene stoffen : None of the components are listed SZW-lijst van reprotoxische stoffen – Borstvoeding : None of the components are listed

SZW-lijst van reprotoxische stoffen – : None of the components are listed

Vruchtbaarheid

SZW-lijst van reprotoxische stoffen – Ontwikkeling : None

: None of the components are listed

Denmark

Classification remarks : Emergency management guidelines for the storage of flammable liquids must be followed

Danish National Regulations : Young people below the age of 18 years are not allowed to use the product

Pregnant/breastfeeding women working with the product must not be in direct contact with

the product

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Other information

: The contents and format of this material safety data sheet are in accordance with REACH 1907/2006 and CLP-EU 1272/2008. All the given information is correct to our current knowledge. None of the indications, compositions or applications have the intention of violating existing patents. Nothing may be duplicated and/or multiplied without our written consent.

| Full text of H- and EUH-statements: | | |
|-------------------------------------|---|--|
| Acute Tox. 4 (Dermal) | Acute toxicity (dermal), Category 4 | |
| Acute Tox. 4 (Inhalation) | Acute toxicity (inhal.), Category 4 | |
| Acute Tox. 4 (Oral) | Acute toxicity (oral), Category 4 | |
| Aquatic Chronic 3 | Hazardous to the aquatic environment – Chronic Hazard, Category 3 | |
| EUH031 | Contact with acids liberates toxic gas. | |
| Eye Dam. 1 | Serious eye damage/eye irritation, Category 1 | |
| H302 | Harmful if swallowed. | |
| H312 | Harmful in contact with skin. | |
| H314 | Causes severe skin burns and eye damage. | |
| H315 | Causes skin irritation. | |
| H318 | Causes serious eye damage. | |

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| Full text of H- and EUH-statements: | | |
|-------------------------------------|--|--|
| H332 | Harmful if inhaled. | |
| H335 | May cause respiratory irritation. | |
| H373 | May cause damage to organs through prolonged or repeated exposure. | |
| H412 | Harmful to aquatic life with long lasting effects. | |
| Skin Corr. 1B | Skin corrosion/irritation, Category 1, Sub-Category 1B | |
| Skin Irrit. 2 | Skin corrosion/irritation, Category 2 | |
| STOT RE 2 | Specific target organ toxicity – Repeated exposure, Category 2 | |
| STOT SE 3 | Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation | |

| Full text of use descriptors | | |
|------------------------------|--|--|
| ERC4 | Industrial use of processing aids in processes and products, not becoming part of articles | |
| ESVOC SPERC 3.22a.v1 | Water treatment chemicals: Industrial (SU10) | |
| PC37 | Water treatment chemicals | |
| PROC2 | Use in closed, continuous process with occasional controlled exposure | |
| PROC4 | Use in batch and other process (synthesis) where opportunity for exposure arises | |
| PROC8a | Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non dedicated facilities | |
| PROC8b | Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities | |
| PROC9 | Transfer of substance or mixture into small containers (dedicated filling line, including weighing) | |
| SU0 | Other | |
| SU22 | Professional uses: Public domain (administration, education, entertainment, services, craftsmen) | |
| SU23 | Electricity, steam, gas water supply and sewage treatment | |
| SU3 | Industrial uses: Uses of substances as such or in preparations* at industrial sites | |
| SU5 | Manufacture of textiles, leather, fur | |

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.