

Fine Chemicals for Water Treatment

AQUATREAT® 691

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 16/02/2023 Revision date: 1/02/2024 Version: 3.0

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

1.1. Product identifier

Product form	:	Mixture
Product name	:	AQUATREAT® 691
UFI	:	2S00-P0RK-800H-SD3E

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 bv Industrial Zone B 122 - Nieuwlandlaan 40/42 3200 AARSCHOT Belgium 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]

Corrosive to metals, Category 1 Skin corrosion/irritation, Category 1, Sub-Category 1B Full text of H- and EUH-statements: see section 16 H290 H314

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) GHS05 CLP Signal word : Danger Contains sodium hydrogensulphite ... %; sodium bisulphite ... %; sodium hydroxide Hazard statements (CLP) : H290 - May be corrosive to metals. H314 - Causes severe skin burns and eye damage. Precautionary statements (CLP) : P234 - Keep only in original container. P280 - Wear protective gloves/protective clothing/eye protection/face protection. P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting. 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. P390 - Absorb spillage to prevent material damage. P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. **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 and/or 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
sodium hydroxide	CAS-No.: 1310-73-2 EC-No.: 215-185-5 EC Index-No.: 011-002-00-6 REACH-no: 01-2119457892- 27-0000	2-5	Skin Corr. 1A, H314

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Specific concentration limits:		
Name	Product identifier	Specific concentration limits
sodium hydroxide	CAS-No.: 1310-73-2 EC-No.: 215-185-5 EC Index-No.: 011-002-00-6 REACH-no: 01-2119457892- 27-0000	(0,5 ≤C < 2) Eye Irrit. 2, H319 (0,5 ≤C < 2) Skin Irrit. 2, H315 (2 ≤C < 5) Skin Corr. 1B, H314 (5 ≤C ≤ 100) Skin Corr. 1A, H314

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 First-aid measures after skin contact First-aid measures after eye contact First-aid measures after ingestion	 Move the person to fresh air. Wash immediately with lots of water. Wash immediately with lots of water (15 minutes). Immediately after ingestion: give lots of water to drink. Seek medical advice immediately.
4.2. Most important symptoms and effe	ects, both acute and delayed
No additional information available	
4.3. Indication of any immediate medica	al 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 su	ubstance or mixture
No additional information available	
5.3. Advice for firefighters	
No additional information available	
SECTION 6: Accidental release mea	asures
6.1. Personal precautions, protective e	quipment and emergency procedures
General measures	: Protective clothing.
6.1.1. For non-emergency personnel	
No additional information available	
6.1.2. For emergency responders	
No additional information available	
6.2. Environmental precautions	
Plug the leak, cut off the supply. Prevent soil ar	nd water pollution.

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.

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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 an	ny 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. Safety glasses.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection: Protective goggles

8.2.2.2. Skin protection

Skin and body protection: Protective clothing

Hand protection: Protective gloves against chemicals (EN 374)

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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.
Appearance	:	Clear.
Odour	:	Smell of ammonia.
Odour threshold	:	Not available
Melting point	:	Not available
Freezing point	:	Not available
Boiling point	:	> 100 °C
Flammability	:	Not available
Explosive limits	:	Not available
Lower explosion limit	:	Not available
Upper explosion limit	:	Not available
Flash point	:	Not available
Auto-ignition temperature	:	Not available
Decomposition temperature	:	Not available
рН	:	> 11
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	:	1,15 (1,13 – 1,17)
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

SECTION 10: Stability and reactivity

10.1. Reactivity

Generates toxic gas in contact with acid (SO2). Heating up due to reaction with acids is possible.

10.2. Chemical stability

Stable at normal conditions.

10.3. Possibility of hazardous reactions

No additional information available

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10.4. Conditions to avoid	
Freezing. (strong) acids.	
10.5. Incompatible materials	
No additional information available	
10.6. Hazardous decomposition products	
No additional information available	

SECTION 11: Toxicological information

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
AQUATREAT® 691	
LD50 oral rat	> 20000 mg/kg
Skin corrosion/irritation	: Causes severe skin burns.
	pH: > 11
Serious eye damage/irritation	: Assumed to cause serious eye damage
	pH: > 11
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

11.2.1. Endocrine disrupting properties

No additional information available

11.2.2. Other information

Other information

: Ammonium carbonate and ammonium bicarbonate can be present in steam. Are admitted as food additives : EC 1333/2008, E503i and E503ii.

SECTION 12: Ecological information		
12.1. Toxicity		
Hazardous to the aquatic environment, short-term : (acute)	Readily biodegradable in water Not classified Not classified	
AQUATREAT® 691		
EC50 - Crustacea [1]	> 1000 mg/l (25h)	
sodium hydroxide (1310-73-2)		
LC50 - Fish [1]	35 – 189 mg/l	
EC50 - Crustacea [1]	40 mg/l	

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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 / R	RID
14.1. UN number or ID number	
UN-No. (ADR) UN-No. (IMDG) UN-No. (IATA) UN-No. (ADN) UN-No. (RID)	 : UN 1824 : UN 1824 : Not applicable : Not applicable : Not applicable : Not applicable
14.2. UN proper shipping name	
Proper Shipping Name (ADR) Proper Shipping Name (IMDG) Proper Shipping Name (IATA) Proper Shipping Name (ADN) Proper Shipping Name (RID) Transport document description (ADR) Transport document description (IMDG)	 SODIUM HYDROXIDE SOLUTION SODIUM HYDROXIDE SOLUTION Not applicable Not applicable Not applicable UN 1824 SODIUM HYDROXIDE SOLUTION, 8, II, (E) UN 1824 SODIUM HYDROXIDE SOLUTION, 8, II
14.3. Transport hazard class(es)	
ADR Transport hazard class(es) (ADR) Danger labels (ADR)	: 8 : 8



: 8

IMDG

Transport hazard class(es) (IMDG)

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Danger labels (IMDG)	: 8
ΙΑΤΑ	
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) Packing group (IMDG)	: II : II
Packing group (IATA)	: Not applicable
Packing group (ADN) Packing group (RID)	: Not applicable : Not applicable
14.5. Environmental hazards	
Dangerous for the environment	: No
Marine pollutant Other information	: No : No supplementary information available
14.6. Special precautions for user	
Overland transport	
Classification code (ADR) Limited quantities (ADR)	: C5 : 11
Excepted quantities (ADR)	: E2
Vehicle for tank carriage	: AT : 2
Transport category (ADR) Hazard identification number (Kemler No.)	: 2
Orange plates	· 80
	1824
Tunnel restriction code (ADR)	: E
EAC code	: 2R
Transport by sea No data available	
Air transport Not applicable	
Inland waterway transport Not applicable	
Rail transport	
Not applicable	
Not applicable 14.7. Maritime transport in bulk accordin	ng to IMO instruments
	ng to IMO instruments

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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)

15.1.2. National regulations

France

Occupational diseases		
Code	Description	
RG 66	Occupational rhinitis an	d asthma
Germany		
Water hazard class (WGK) Hazardous Incident Ordinan	ce (12. BImSchV)	 WGK 1, Slightly hazardous to water (Classification according to AwSV, Annex 1). Is not subject of the Hazardous Incident Ordinance (12. BImSchV)
Netherlands		
ABM category		: B(4) - low hazard for aquatic organisms
SZW-lijst van kankerverwekl	kende stoffen	: None of the components are listed
SZW-lijst van mutagene stof	fen	: None of the components are listed
SZW-lijst van reprotoxische	stoffen – Borstvoeding	: None of the components are listed
SZW-lijst van reprotoxische Vruchtbaarheid	stoffen –	: None of the components are listed
SZW-lijst van reprotoxische	stoffen – Ontwikkeling	: None of the components are listed
Denmark		
Danish National Regulations	3	: Young people below the age of 18 years are not allowed to use the product
15.2. Chemical safety a	ssessment	

No additional information available

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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 (Oral)	Acute toxicity (oral), Category 4	
EUH031	Contact with acids liberates toxic gas.	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2	
H290	May be corrosive to metals.	
H302	Harmful if swallowed.	
H314	Causes severe skin burns and eye damage.	
H315	Causes skin irritation.	
H319	Causes serious eye irritation.	
Skin Corr. 1A	Skin corrosion/irritation, Category 1, Sub-Category 1A	
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B	
Skin Irrit. 2	Skin corrosion/irritation, Category 2	

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.