

SAFETY DATA SHEET according to Regulation (EC) No. 1907/2006

Champion Water Hardener

Version 4.0

Print Date 2023/11/03

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MSDS code: MAAA747

SECTION 1: Identification of the substance/mixture and of the company/undertaking 1.1. Product identifier Trade name Champion Water Hardener 1.2. Relevant identified uses of the substance or mixture and uses advised against Use of the Water treatments • Substance/Mixture Uses advised against : At this moment we have not identified any uses advised against Details of the supplier of the safety data sheet 1.3. Company **Brenntag UK Limited** 5 Alpha House, Lawnswood Business Park GB LS16 6QY Leeds Telephone +44 (0) 113 3879 200 : Telefax +44 (0) 113 3879 280 : E-mail address msds@brenntag.co.uk : 1.4. **Emergency telephone number** Emergency telephone Emergency only telephone number (open 24 hours): number +44 (0) 1865 407333 (N.C.E.C. Culham) **SECTION 2: Hazards identification** 2.1. Classification of the substance or mixture Classification according to Regulation S.I. 2019/720 (GB CLP) Regulation S.I. 2019/720 (GB CLP) Hazard **Hazard class** Hazard category **Target Organs** statements H319 Eye irritation Category 2 ---For the full text of the H-Statements mentioned in this Section, see Section 16. Most important adverse effects Human Health See section 11 for toxicological information. 1 R48424 1/18 ΕN



Physical and chemical:See section 9/10 for physicochemical information.hazardsPotential environmental:See section 12 for environmental information.effects

2.2. Label elements

Labelling according to Regulation S.I. 2019/720 (GB CLP)

Hazard symbols	:		
Signal word	:	Warning	
Hazard statements	:	H319	Causes serious eye irritation.
Precautionary statements			
Prevention	:	P264 P280	Wash skin thoroughly after handling. Wear eye protection/ face protection.
Response	:		338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
		P337 + P313	If eye irritation persists: Get medical advice/ attention.

2.3. Other hazards

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.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

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3.2. Mixtures

			Classification (Regulation S.I. 2019/720 (GB CLP))		
Haza	rdous components	Amount [%]	Hazard class / Hazard category	Hazard statements	
calcium chlor	ide				
Index-No. CAS-No. EC-No. EU REACH- Reg. No.	: 017-013-00-2 : 10043-52-4 : 233-140-8 : 01-2119494219-28-xxxx	> 75 - < 99	Eye Irrit.2	H319	

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

SECTION 4: First aid measures

4.1. Description of first aid measures

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	Treatment	: Do NOT induce vomiting. The product could be strengthened	
4.3.	Indication of any immedia	ate medical attention and special treatment needed	
	Effects	: Causes serious eye irritation. See Section 11 for more detailed information on health effects and symptoms.	
	Symptoms	: Inhalation of vapours is irritating to the respiratory system, may cause throat pain and cough. Moderate skin irritation, See Section 11 for more detailed information on health effects and symptoms.	
4.2.	Most important symptom	s and effects, both acute and delayed	
	Protection of First Aid Responders	: First Aid responders should pay attention to self-protection and use the recommended protective clothing.	
	If swallowed	: Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. If symptoms persist, call a physician.	
	In case of eye contact	: Rinse immediately with plenty of water, also under the eyelids, for at least 10 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an eye specialist immediately. Go to an ophthalmic hospital if possible.	
	In case of skin contact	: Wash off immediately with plenty of water. If skin irritation persists, call a physician.	
	If inhaled	: Remove to fresh air. If symptoms persist, call a physician.	
	General advice	: Take off all contaminated clothing immediately.	



with hydrogen chloride from the stomach causing irritation to oesophagus and respiratory system.Clean mouth with water and drink afterwards plenty of water.Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

	Suitable extinguishing media Unsuitable extinguishing media	:	Not combustible. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. No information available.
5.2.	Special hazards arising fro	om t	the substance or mixture
	Specific hazards during firefighting	:	Incomplete combustion may form toxic pyrolysis products.
	Hazardous combustion products	:	Under certain fire conditions, traces of other toxic products cannot be excluded.
5.3.	Advice for firefighters		
	Special protective equipment for firefighters Further advice	:	In the event of fire, wear self-contained breathing apparatus.Wear personal protective equipment. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	: Use personal protective equipment. Keep away unprotected
	persons. Ensure adequate ventilation. Avoid contact with skin
	and eyes.

6.2. Environmental precautions

Environmental	: Do not flush into surface water or sanitary sewer system.
precautions	Avoid subsoil penetration.

6.3. Methods and materials for containment and cleaning up

Methods and materials for containment and cleaning up	Use mechanical handling equipment. Keep in suita containers for disposal. Flush away residuals with water.	
Further information	Treat recovered material as described in the sectio considerations".	n "Disposal

6.4. Reference to other sections

See Section 1 for emergency contact information.

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See Section 8 for information on personal protective equipment. See Section 13 for waste treatment information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling	: Keep container tightly closed. Use personal protective equipment. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Do not breathe vapours/dust. Emergency eye wash fountains and emergency showers should be available in the immediate vicinity.
Hygiene measures	: Keep away from food, drink and animal feedingstuffs. Smoking, eating and drinking should be prohibited in the application area. Wash hands before breaks and at the end of workday. Take off all contaminated clothing immediately. Handle in accordance with good industrial hygiene and safety practice.
7.2. Conditions for safe storag	je, including any incompatibilities

Requirements for storage areas and containers	:	Store in original container. Avoid excessive ventilation during storage as product can absorb moisture from the air.
Advice on protection against fire and explosion	:	Normal measures for preventive fire protection.
Further information on storage conditions	:	Keep tightly closed in a dry and cool place. Storage temperature not to exceed 25°C.
Advice on common storage	:	Keep away from food, drink and animal feedingstuffs.

7.3. Specific end use(s)

Specific use(s) : No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Contains no substances with occupational exposure limit values.

Component:	calcium chloride		CAS-No. 10043-52-4
Derived No	Effect Level (DNEL)/Derived Mi	inimal Effe	ct Level (DMEL)
DNEL Workers, Acute - loca DNEL Workers, Long-term -	al effects, Inhalation		10 mg/m3 5 mg/m3
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DNEL Consumers, Acute - local effects, Inhalation	:	5 mg/m3
DNEL Consumers, Long-term - local effects, Inhalation	:	2.5 mg/m3

Predicted No Effect Concentration (PNEC)

2

No PNEC value was derived.

Component:

Other Occupational Exposure Limit Values

UK. EH40 Workplace Exposure Limits (WELs), as amended, Time Weighted Average (TWA):, Inhalable dust., Inhalable dust. 10 mg/m3, 8 h

UK. EH40 Workplace Exposure Limits (WELs), as amended, Time Weighted Average (TWA):, Respirable dust., Respirable dust 4 mg/m3, 8 h

8.2. Exposure controls

Appropriate engineering controls

Refer to protective measures listed in sections 7 and 8.

Personal protective equipment

Respiratory protection

Advice	:	Required, if exposure limit is exceeded (e.g. OEL). Respiratory protection complying with EN 141.	
Hand protection			
Advice	:	Protective gloves complying with EN 374. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the glove Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Protective gloves should be replaced at first signs of wear. Recommended Material: Neoprene Chloroprene	S.
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	Nitrile rubber Do not wear leather gloves.
Permeation rate : Glove thickness :	> 8 hrs > 0.5 mm
Eye protection	
Advice :	Safety goggles
Skin and body protection	1
Advice :	Wear personal protective equipment.
Environmental exposure	e controls
General advice :	Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form	:	powder	
Physical state	:	solid	
Colour	:	white, off-white, to, light yellow, light pink	
Odour	:	No data available	
Odour Threshold	:	No data available	
Melting point/freezing point	:	782 °C	
Initial boiling point and boiling range	:	> 1,600 °C	
Flammability	:	No data available	
Upper explosion limit / Upper flammability limit	:	No data available	
Lower explosion limit / Lower flammability limit	:	No data available	
Flash point	:	No data available	
Auto-ignition temperature	:	No data available	
Decomposition temperature	:	No data available	
Self-Accelerating decomposition temperature	:	No data available	
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(SADT)		
рН	:	7 - 11 Concentration: 10 % (as aqueous solution)
Viscosity Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	No data available
Flow time	:	No data available
Solubility(ies) Water solubility	:	745 g/l (20 °C)
		1590 g/l (100 °C)
Solubility in other solvents	:	No data available
Dissolution Rate	:	No data available
Partition coefficient: n- octanol/water	:	No data available
Dispersion Stability	:	No data available
Vapour pressure	:	negligible
Relative density	:	No data available
Density	:	2.15 g/cm3 (25 °C)
		2.15 g/cm3 (15 °C)
Bulk density	:	No data available
Relative vapour density	:	No data available
Particle characteristics No data available		
Other information		
Explosives	:	Not explosive
Oxidizing properties	:	not oxidising
CTION 10: Stability and rea	ctiv	/ity
1. Reactivity		
Advice	: N	No decomposition if stored and applied as directed.

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10.2. Chemical stability

Advice

: Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions	: Strong reducing agents Oxidizing agents Can cause pitting and corrosion of some grades of stainless steel under high temperature.
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10.4. Conditions to avoid

Conditions to avoid	: No information available.
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10.5. Incompatible materials

Materials to avoid : Strong oxidizing agents, Strong reducing agents, Risk of violent reaction.

10.6. Hazardous decomposition products

Hazardous decomposition : No information available. products

SECTION 11: Toxicological information

11.1. Information on the hazard classes within the meaning of Regulation (EC) No. 1272/2008

Data for the produc	t	
	Acute toxicity	
	Oral	
	No data available	
	Inhalation	
	No data available	
	Dermal	
	No data available	
	Irritation	
	Skin	
	No data available	
	Eyes	
Result	: Causes serious eye irritation.	
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	Sensitisation	
	No data available	
	CMR effects	
	CMR Properties	
Carcinogenicity	: No data available	
Mutagenicity	: No data available	
Reproductive toxicity	: No data available	
	Specific Target Organ Toxicity	
	Single exposure	
	No data available	
	Repeated exposure	
	No data available	
	Other toxic properties	
	Repeated dose toxicity	
	No data available	
	Aspiration hazard	
	No data available	
Component:	calcium chloride	CAS-No. 10043-52-4
	Acute toxicity	
	Oral	
LD50	: 2120 mg/kg body weight(Rat, male Guideline 401)	and female) (OECD Test
	Inhalation	
II	No data available	
	Dermal	
LD50	: > 5000 mg/kg body weight(Rabbit, r	nale and female)
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	Irritation
	Skin
Result	: No skin irritation (Rabbit) (OECD Test Guideline 404)
	Eyes
Result	: Irritating to eyes. (Rabbit) (OECD Test Guideline 405)
	Sensitisation
Result	: Study scientifically not justified.
	CMR effects
	Carcinogenicity
	It dissociates into ions that are present physiologically in relatively high levels in vertebrates. Therefore, a study is considered (scientifically) unnecessary.
	CMR Properties
Carcinogenicity Mutagenicity Teratogenicity Reproductive toxicity	 Study scientifically not justified. In vitro tests did not show mutagenic effects Did not show teratogenic effects in animal experiments. Study scientifically not justified.
	Teratogenicity
NOAEL Maternal	: 169 mg/kg (Rabbit)(OECD Test Guideline 414)
	Specific Target Organ Toxicity
	Single exposure
Remarks	: The substance or mixture is not classified as specific target organ toxicant, single exposure.
	Repeated exposure
Remarks	: The substance or mixture is not classified as specific target organ
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I	toxicant, repeated exposure.	
	Other toxic properties	
	Repeated dose toxicity	
	; It dissociates into ions that are pre high levels in vertebrates. Therefore (scientifically) unnecessary.	
	Aspiration hazard	
П	Not applicable,	
1.2. Information on othe	er hazards	
Data for the produc	t	
	Endocrine disrupting properties	3
Assessment	to REACH Article 57(f) or Com	disrupting properties according
Component:	calcium chloride	CAS-No. 10043-52-4
	Endocrine disrupting properties	i
Assessment	to REACH Article 57(f) or Com	disrupting properties according
ECTION 12: Ecologica	al information	
2.1. Toxicity		
Component:	calcium chloride	CAS-No. 10043-52-4
	Acute toxicity	
	Fish	
LC50	: 4,630 mg/l (Pimephales promelas (test; EPA 600/4-90/027)	fathead minnow); 96 h) (static
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т	oxicity to daphnia and other aquatic invertebra	tes
NOEC LC50	 2,000 mg/l (Daphnia magna; 48 h) (static to Guideline 202) 2,400 mg/l (Daphnia magna; 48 h) (static to Guideline 202) 	
	algae	
EC50	: 2900 mg/l (Pseudokirchneriella subcapitata (OECD Test Guideline 201)	a (green algae); 72 h)
	Bacteria	
II	: Study scientifically unjustified.	
2.2. Persistence and de		
Component:	calcium chloride	CAS-No. 10043-52-4
	Persistence and degradability	
	Persistence	
Result	: (Related to: Water) decomposition by hydro	olysis.
	Biodegradability	
Result	: The methods for determining the biological applicable to inorganic substances.	degradability are not
2.3. Bioaccumulative po	otential	
Component:	calcium chloride	CAS-No. 10043-52-4
	Bioaccumulation	
Result	: Bioaccumulation is not expected.	
2.4. Mobility in soil		
-		
Component:	calcium chloride	CAS-No. 10043-52-4
	Mobility	
Water	: The product is water soluble.	
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2.5. Results of PBT and vPv	12.5. Results of PBT and vPvB assessment			
Data for the product				
	Results of PBT and vPvB assessment			
Result	: This substance/mixture contains no components consider either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0. higher.			
Component:	calcium chloride CAS-No. 10	043-52-4		
	Results of PBT and vPvB assessment			
Result	: The PBT or vPvB criteria of Annex XIII to the REACH Reg does not apply to inorganic substances.	ulation		
2.6. Endocrine disrupting pr	roperties			
Data for the product				
Endocrine disrupting potential	 The substance/mixture does not contain components cons have endocrine disrupting properties according to REACH 57(f) or Commission Delegated regulation (EU) 2017/2100 Commission Regulation (EU) 2018/605 at levels of 0.1% or 	Article) or		
Component:	calcium chloride CAS-No. 10	043-52-4		
Endocrine disrupting potential	 The substance/mixture does not contain components cons have endocrine disrupting properties according to REACH 57(f) or Commission Delegated regulation (EU) 2017/2100 Commission Regulation (EU) 2018/605 at levels of 0.1% or 	Article) or		
2.7. Other adverse effects				
Data for the product				
	Additional ecological information			
Result	: Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration.			
Component:	calcium chloride CAS-No. 10	043-52-4		
	Additional ecological information			
Result	: Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration.			
SECTION 13: Disposal considerations				



13.1. Waste treatment methods

Product	:	Disposal together with normal waste is not allowed. Special disposal required according to local regulations. Do not let product enter drains. Contact waste disposal services. This product shall be disposed of or recovered in compliance with Directive 2008/98/EC on waste as lastly amended.
Contaminated packaging	:	Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning. If recycling is not practicable, dispose of in compliance with local regulations.
European Waste Catalogue Number	:	15 01 02 plastic packaging

SECTION 14: Transport information

Not dangerous goods for ADR, RID, IMDG and IATA.

14.1. UN number or ID number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

Not applicable.

14.4. Packaging group

Not applicable.

14.5. Environmental hazards

Not applicable.

14.6. Special precautions for user

Not applicable.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

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Component: calcium chloride CAS-No. 10043-52 EU. Chemicals Subject : ; The substance/mixture does not fall under this legislation.	-4			
to PIC Procedure: Regulation 649/2012/EU on export and import of dangerous chemicals, as amended				
EU. REACH, Annex XVII, : Point Nos.: , 75; Listed. Marketing and Use Restrictions (Regulation 1907/2006/EC)				
EU. Directive : ; The substance/mixture does not fall under this legislation. 2012/18/EU (SEVESO III) on major accident hazards involving dangerous substances, Annex I				
UK. Releases to air and : Annual reporting level threshold: 10,000 kg water (UK ISR)				
Germany. Ordinance on : WGK 1: slightly hazardous to water: 220 Facilities Handling Substances that are Hazardous to Water, ((AwSV of 21 April 2017), UBA, BAnz AT), as amended				
15.2. Chemical safety assessment				
No data available				
SECTION 16: Other information				
Full text of H-Statements referred to under sections 2 and 3.				
H319 Causes serious eye irritation.				
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Full text of the Notes referred to under section 3.

Abbreviations and Acronyms

AU AIICL	Australia. Industrial Chemicals Act (AIIC) List
BCF	bioconcentration factor
BOD	biochemical oxygen demand
CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging
CMR	carcinogenic, mutagenic or toxic to reproduction
COD	chemical oxygen demand
DNEL	derived no-effect level
DSL	Canada. Environmental Protection Act, Domestic Substances List
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
ENCS (JP)	Japan. Kashin-Hou Law List
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
IECSC	China. Inventory of Existing Chemical Substances
INSQ	Mexico. National Inventory of Chemical Substances
ISHL (JP)	Japan. Inventory of Industrial Safety & Health
KECI (KR)	Korea. Existing Chemicals Inventory
LC50	median lethal concentration
LOAEC	lowest observed adverse effect concentration
LOAEL	lowest observed adverse effect level
LOEL	lowest observed effect level
NDSL	Canada. Environmental Protection Act. Non-Domestic Substances List
NLP	no-longer polymer
NOAEC	no observed adverse effect concentration
NOAEL	no observed adverse effect level
NOEC	no observed effect concentration
NOEL	no observed effect level
NZIOC	New Zealand. Inventory of Chemicals
OECD	Organisation for Economic Cooperation and Development
OEL	occupational exposure limit
ONT INV	Canada. Ontario Inventory List
PBT	persistent, bioaccumulative and toxic
PHARM (JP)	Japan. Pharmacopoeia Listing
PICCS (PH)	Philippines. Inventory of Chemicals and Chemical Substances
PNEC	predicted no-effect concentration
REACH Auth. No.:	REACH Authorisation Number
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REACH AuthAppC. No.	REACH Authorisation Application Consultation Number
UK REACH Auth. No.:	UK REACH Authorisation Number
UK REACH AuthAppC. No.	UK REACH Authorisation Application Consultation Number
UK REACH-Reg.No	UK REACH Registration Number
STOT	specific target organ toxicity
SVHC	substance of very high concern
TCSI	Taiwan. Existing Chemicals Inventory
TH INV	Thailand. Existing Chemicals Inventory from FDA
TSCA	US. Toxic Substances Control Act
UVCB	substance of unknown or variable composition, complex reaction products or biological materials
VN INVL	Vietnam. National Chemical Inventory
vPvB	very persistent and very bioaccumulative
Further information	
Key literature references : and sources for data	Supplier information and data from the "Database of registered substances" of the European Chemicals Agency (ECHA) were used to create this safety data sheet.
Methods used for : product classification	The classification for human health, physical and chemical hazards and environmental hazards were derived from a combination of calculation methods and if available test data.
Hints for trainings :	The workers have to be trained regularly on the safe handling of the products based on the information provided in the Safety Data Sheet and the local conditions of the workplace. National regulations for the training of workers in the handling of hazardous materials must be adhered to.
Other information :	The information provided in this Safety Data Sheet is correct to our knowledge at the date of its revision. The information given only describes the products with regard to safety arrangements and is not to be considered as a warranty or quality specification and does not constitute a legal relationship. The information contained in this Safety Data Sheet
	relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.
Indicates updated section.	