Со	nnecting <mark>Chemistry</mark>		BREI	NNTAG
	FETY DATA SHEET &		ation (EC) No. 1	907/2006
HTI	H Briquettes (All gra	ades)		
Vers	sion 5.0		F	Print Date 2020/05/06
Revi	ision date / valid from 202	0/05/06	MS	SDS code: MZZZ652
SEC	TION 1: Identification of	the substance/mixture	and of the compar	ny/undertaking
1.1.	Product identifier			
	Trade name Substance name Index-No. CAS-No. EC-No.	<ul> <li>HTH Briquettes (All e</li> <li>calcium hypochlorite</li> <li>017-012-00-7</li> <li>7778-54-3</li> <li>231-908-7</li> </ul>		
1.2.	Relevant identified uses of	of the substance or mixtu	ire and uses advised	against
	Use of the Substance/Mixture	: Water treatments, di	sinfectant	
	Uses advised against	: At this moment we h against	ave not identified any	uses advised
1.3.	Details of the supplier of	the safety data sheet		
	Company Telephone Telefax E-mail address	<ul> <li>Brenntag UK Limited Alpha House, Lawns GB LS16 6QY Leeds</li> <li>+44 (0) 113 3879 20</li> <li>+44 (0) 113 3879 28</li> <li>msds@brenntag.co.</li> </ul>	wood Business Park s 0 0	
1.4.	Emergency telephone nu	C C		
	Emergency telephone number		phone number (open 2 (N.C.E.C. Culham)	4 hours):
SEC	TION 2: Hazards identifi	cation		
2.1.	Classification of the subs	tance or mixture		
	Classification according	o Regulation (EC) No 12	72/2008	
		REGULATION (EC) N	lo 1272/2008	
	Hazard class	Hazard category	Target Organs	Hazard statements
	Oxidizing solids	Category 2		H272
	Acute toxicity (Oral)	Category 4		H302
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	Skin corrosion		Sub-category 1B	H314				
	Short-term (acute) aquat hazard	ic	Category 1	H400				
	For the full text of the H-Statements mentioned in this Section, see Section 16.							
	Most important adverse	effec	ts					
	Human Health	:	See section 11 for	toxicological information.				
	Physical and chemical hazards	:	See section 9/10 f	or physicochemical information.				
	Potential environmental effects	:	See section 12 for	environmental information.				
2.2.	Label elements							
	Labelling according to	Regu	llation (EC) No 12	72/2008				
	Hazard symbols	:						
			<u> </u>					
	Signal word	:	Danger					
	Hazard statements	:	H272 H302 H314 H400	May intensify fire; oxidizer. Harmful if swallowed. Causes severe skin burns and eye damag Very toxic to aquatic life.	Je.			
	Precautionary statements							
	Prevention	:	P210	Keep away from heat, hot surfaces, sparks open flames and other ignition sources. No smoking.				
			P260 P280	Do not breathe dust or mist. Wear protective gloves/ protective clothing	g/			
			P220	eye protection/ face protection. Keep/Store away from clothing/ combustib materials.	le			
			P264 P270	Wash skin thoroughly after handling. Do not eat, drink or smoke when using this	S			
			P271	product. Use only outdoors or in a well-ventilated				
			P273	area. Avoid release to the environment.				
	Response	:	P303 + P361 + P3	53 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.				
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#### HTH Briquettes (All grades)

		P304 + P340 + F	<ul> <li>P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing.</li> <li>Immediately call a POISON CENTER/doctor.</li> </ul>
	ļ	P305 + P351 + F	P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a
		P370 + P378	POISON CENTER/doctor. In case of fire: Use dry sand, dry chemical
	[	P301 + P312	or alcohol-resistant foam to extinguish. IF SWALLOWED: Call a POISON
		P310	CENTER/doctor if you feel unwell. Immediately call a POISON
	1	P363	CENTER/doctor. Wash contaminated clothing before reuse.
		P370 + P378	In case of fire: Use water spray to extinguish.
		P391	Collect spillage.
Storage	:	P405	Store locked up.
Disposal	:	P501	Dispose of contents/ container in accordance with the local regulations.
Additional Labelling: EUH031 Contact with EUH206 Warning! Do (chlorine).			er products. May release dangerous gases
Hazardous component	ts which	n must be listed	on the label:
<ul> <li>calcium hypochlorite</li> <li>Calcium dihydroxide</li> <li>calcium chloride</li> </ul>			
2.3. Other hazards			
2.3. Other hazards For Results of PBT and	d vPvB a	assessment see	section 12.5.
For Results of PBT and			
For Results of PBT and SECTION 3: Composition/			
For Results of PBT and SECTION 3: Composition/			
For Results of PBT and SECTION 3: Composition/	/informa		dients Classification
For Results of PBT and SECTION 3: Composition/ 3.1. Substances	/informa	ation on ingre	Classification (REGULATION (EC) No 1272/2008) Hazard class / Hazard Hazard statements



#### HTH Briquettes (All grades)

Index-No. CAS-No. EC-No.	: 017-012-00-7 : 7778-54-3 : 231-908-7	50 - < 100	Ox. Sol.2 Acute Tox.4 Skin Corr.1B Aquatic Acute1	H272 H302 H314 H400
Calcium dih	ydroxide			
CAS-No. EC-No.	: 1305-62-0 : 215-137-3	< 3	Eye Dam.1	H318
Calcium chl	orate			
CAS-No. EC-No.	: 10137-74-3 : 233-378-2	< 2	Ox. Sol.2	H272
calcium chl	oride			
Index-No. CAS-No. EC-No.	: 017-013-00-2 : 10043-52-4 : 233-140-8	< 2	Acute Tox.4 Eye Irrit.2	H302 H319

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

SEC	TION 4: First aid measu	res	
4.1.	Description of first aid me	easures	
	General advice	: Take off all contaminated clothing immediately.	
	If inhaled	: In case of accident by inhalation: remove casualty to fresh air and keep at rest. If breathing is irregular or stopped, administer artificial respiration. Call a physician immediately. If unconscious, place in recovery position and seek medical advice.	
	In case of skin contact	: Wash off immediately with soap and plenty of water. Call a physician immediately.	
	In case of eye contact	: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Consult an eye specialist immediately. Go to an ophthalmic hospital if possible.	
	If swallowed	: Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a physician immediately.	
4.2.	Most important symptom	is and effects, both acute and delayed	
	Symptoms	: See Section 11 for more detailed information on health effects and symptoms. Breathing difficulties, Nausea	
	Effects	: Extremely corrosive and destructive to tissue. If ingested,	
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		severe burns of the mouth and throat, as well as a danger of perforation of the oesophagus and the stomach. See Section 11 for more detailed information on health effects and symptoms.
4.3.	Indication of any immediat	e medical attention and special treatment needed
	Treatment	: Treat symptomatically.
SEC	TION 5: Firefighting meas	sures
5.1.	Extinguishing media	
	Suitable extinguishing media Unsuitable extinguishing media	<ul> <li>Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. water spray</li> <li>High volume water jet, extinguishing powder</li> </ul>
5.2.	Special hazards arising fro	om the substance or mixture
	Specific hazards during firefighting Hazardous combustion products	<ul> <li>Incomplete combustion may form toxic pyrolysis products.</li> <li>Carbon monoxide, The formation of caustic fumes is possible. Heating or fire can release toxic gas. Hydrogen chloride</li> </ul>
5.3.	Advice for firefighters	
	Special protective equipment for firefighters Specific extinguishing methods Further advice	<ul> <li>In the event of fire, wear self-contained breathing apparatus.Wear appropriate body protection (full protective suit)</li> <li>Control smoke with water spray.</li> <li>Collect contaminated fire extinguishing water separately. This must not be discharged into drains.</li> </ul>
SEC	TION 6: Accidental releas	se measures
6.1.		tective equipment and emergency procedures
	Personal precautions	: Keep away unprotected persons. Use personal protective equipment. Ensure adequate ventilation. Avoid contact with the skin and the eyes. Do not breathe vapours or spray mist.
6.2.	Environmental precautions	S
	Environmental precautions	: Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration.
6.3.	Methods and materials for	containment and cleaning up
	Methods and materials for containment and cleaning up	: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders). Keep in suitable, closed containers for disposal. Use neutralizing agent. Ensure
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		adequate ventilation. : Use mechanical handling equipment.
	Further information	: Treat recovered material as described in the section "Disposal considerations".
6.4.	Reference to other section	IS
	See Section 1 for emergen See Section 8 for informati See Section 13 for waste to	on on personal protective equipment.
SEC	TION 7: Handling and sto	rage
7.1.	Precautions for safe hand	ling
	Advice on safe handling	: Keep container tightly closed. Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Do not breathe vapours or spray mist. Use respirator with appropriate filter if vapours or aerosol are released. Emergency eye wash fountains and emergency showers should be available in the immediate vicinity. Any unavoidable deposit of dust must be regularly removed. Do not mix with other products. Do not dissolve before use.
	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.
7.2.	Conditions for safe storag	e, including any incompatibilities
	Requirements for storage areas and containers	: Store in original container.
	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. Keep in a well- ventilated place. Incompatible materials (see section 10)
	Advice on common storage	: Keep away from food, drink and animal feedingstuffs. Do not store together with the following materials: Flammable materials Reducing agents Acids
7.3.	Specific end use(s)	
	Specific use(s)	: No information available.
SEC <sup>.</sup>	TION 8: Exposure contro	Is/personal protection
8.1.	Control parameters	
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component:	Calcium dihydroxide	CAS-No. 1305-62
	Other Occupational Exposu	re Limit Values
UK. EH40 Workp 5 mg/m3	lace Exposure Limits (WELs), as ar	mended, Time Weighted Average (TWA
	9/161/EU, 2017/164/EU, as amende	in Directives 91/322/EEC, 2000/39/EC, led, Time Weighted Average (TWA):,
	9/161/EU, 2017/164/EU, as amende	in Directives 91/322/EEC, 2000/39/EC, led, Short Term Exposure Limit (STEL):
UK. EH40 Workp Respirable fractic 1 mg/m3		mended, Time Weighted Average (TWA
UK. EH40 Workp (STEL):, Respiral 4 mg/m3		mended, Short Term Exposure Limit
ELV (IE), Short T 4 mg/m3, (15 mir Indicative OELV	erm Exposure Limit (STEL):, Respi utes)	irable fraction.
ELV (IE), Time W 1 mg/m3 Indicative OELV	eighted Average (TWA):, Respirab	ole fraction.
omponent:	calcium chloride	CAS-No. 10043-52
Derived	No Effect Level (DNEL)/Derived N	Minimal Effect Level (DMEL)
DNEL Workers, Acute -	local effects, Inhalation	: 10 mg/m3
-	rm - local effects, Inhalation	: 5 mg/m3
DNEL Consumers, Acut	e - local effects, Inhalation	: 5 mg/m3

#### BRENNTAG **ConnectingChemistry** HTH Briquettes (All grades) DNEL Consumers, Long-term - local effects, Inhalation 2.5 mg/m3 2 Predicted No Effect Concentration (PNEC) No PNEC value was derived. 1 8.2. Exposure controls Appropriate engineering controls Refer to protective measures listed in sections 7 and 8. Personal protective equipment Respiratory protection Advice 1 In case of brief exposure or low pollution use breathing filter apparatus. In case of intensive or longer exposure use self-contained breathing apparatus. Respiratory protection complying with EN 141. Particle filter:P2 Hand protection Advice Protective gloves complying with EN 374. 2 Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. 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. Material : Chloroprene rubber (CR) Eye protection Advice : Safety goggles Face-shield Equipment should conform to EN 166 Skin and body protection Advice Impervious clothing Chemical resistant apron Apron Environmental exposure controls : Do not flush into surface water or sanitary sewer system. General advice Avoid subsoil penetration.



#### HTH Briquettes (All grades)

#### **SECTION 9: Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

Form	:	tablet
Colour	:	Whitish
Odour	:	characteristic
Odour Threshold	:	not determined
рН	:	11.5
Melting point/freezing point	:	100 °C Decomposition
Initial boiling point and boiling range	:	not determined
Flash point	:	Not applicable
Evaporation rate	:	Not applicable
Flammability (solid, gas)	:	no data available
Upper explosion limit	:	not determined
Lower explosion limit	:	not determined
Vapour pressure	:	Not applicable
Relative vapour density	:	no data available
Relative density	:	Not determined.
Density	:	1.3 g/cm3 (20 °C)
Water solubility	:	217 g/l (20 °C)
Partition coefficient: n-octanol/water	:	not determined
Auto-ignition temperature	:	not determined
Thermal decomposition	:	170 - 180 °C
Viscosity, dynamic	:	Not applicable
Viscosity, kinematic	:	Not applicable
Explosivity	:	no data available
Oxidizing properties	:	no data available
Other information		

9.2. Other information



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No further information available.

SEC	TION 10: Stability and rea	activity	
10.1.	Reactivity		
	Advice	: No information available.	
10.2.	Chemical stability		
	Advice	<ul> <li>Do not store product where the average daily temperature exceeds 35 °C.</li> <li>Storage above this temperature may result in rapid decomposition, evolution of chlorine gas and heat.</li> </ul>	
10.3.	Possibility of hazardous re	eactions	
	Hazardous reactions Hazardous reactions	<ul> <li>Corrosive in contact with metals</li> <li>Never mix this product with Organic Chlorine (Trichlor or Dichlor) within the same container. Reacts with: Strong oxidizing agents Alcohols Amines aqueous acids and alkalis Reacts with flammable substances: fire danger.</li> </ul>	
10.4.	Conditions to avoid		
	Conditions to avoid Thermal decomposition	: No further relevant information available. : 170 - 180 °C	
10.5.	Incompatible materials		
	Materials to avoid	: Do not use together with other products. May release dangerous gases (chlorine)	
10.6.	Hazardous decomposition	products	
	Hazardous decomposition products	: Toxic gases/vapors	
SEC	TION 11: Toxicological in	formation	
11.1.	Information on toxicologic	al effects	
D	Data for the product		
		Acute toxicity	
		Oral	_
	estimate	822.05 mg/kg ) (Calculation method)	_
С	Component:	calcium hypochlorite CAS-No. 7778-54-3	
		Acute toxicity Oral	
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LD50 : 850 mg/kg (Rat)			
	Inhalation		
II	no data available		
	Dermal		
LD50 : > 2000 mg/kg (Rabbit)			
	Irritation		
	Skin		
Result	: Very corrosive (Rabbit)		
	Eyes		
Result	: Causes serious eye damage. (Rabbit)		
	Sensitisation		
Result	: Did not cause sensitisation on laboratory animals.		
	CMR effects		
	CMR Properties		
Carcinogenicity Mutagenicity Reproductive toxicity	<ul> <li>no data available</li> <li>no data available</li> <li>no data available</li> </ul>		
	Specific Target Organ Toxicity		
	Single exposure		
Remarks	: no data available		
	Repeated exposure		
Remarks	: no data available		
	Other toxic properties		
	Aspiration hazard		
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п	Not applicable,	
Component:	Calcium dihydroxide	CAS-No. 1305-62-
	Acute toxicity	
	Oral	
LD50	: 7430 mg/kg (Rat)	
	Other toxic properties	
	Aspiration hazard	
П	Not applicable,	
Component:	Calcium chlorate	CAS-No. 10137-74-
	Other toxic properties	
	Aspiration hazard	
П	Not applicable,	
Component:	calcium chloride	CAS-No. 10043-52-
	Acute toxicity	
	Oral	
LD50 Oral	: 2120 mg/kg body weight(Rat, male ar Guideline 401)	nd female) (OECD Test
	Inhalation	
II	no data available	
	Dermal	
LD50 Dermal	: > 5000 mg/kg body weight(Rabbit, ma	ale and female)
	Irritation	
	Skin	
Result	: No skin irritation (Rabbit) (OECD Test	Guideline 404)
	Eyes	
Result	: Causes serious eye irritation. (Rabbit)	) (OECD - Guideline 405)
	Sensitisation	
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Result	: Study scientifically not justified.	
	CMR effects	
	CMR Properties	-
Carcinogenicity Mutagenicity Teratogenicity Reproductive toxicity	<ul> <li>Study scientifically not justified.</li> <li>In vitro tests did not show mutagenic effects</li> <li>Did not show teratogenic effects in animal experiments.</li> <li>Study scientifically not justified.</li> </ul>	
	Teratogenicity	_
NOAEL Maternal	: 169 mg/kg (Rabbit)(OECD Test Guideline 414)	
	Specific Target Organ Toxicity	1
	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 toxicant, repeated exposure.	
	Other toxic properties	
	Repeated dose toxicity	-
	; It dissociates into ions that are present physiologically in relatively high levels in vertebrates. Therefore, a study is considered (scientifically) unnecessary.	
	Aspiration hazard	-
II	Not applicable,	
SECTION 12: Ecological i 2.1. Toxicity		
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Component:	calcium hypochlorite	CAS-No. 7778-54-3
	Acute toxicity	
	Fish	
LC50 LC50	: 0.088 mg/l (Lepomis macrochirus (l 0.16 mg/l (Oncorhynchus mykiss (ra	• / /
Т	oxicity to daphnia and other aquatic inve	ertebrates
EC50	: 0.11 mg/l (Daphnia magna (Water f	lea); 48 h)
	algae	
II	: Very toxic to aquatic organisms.	
	M-Factor	
M-Factor (Acute Aquat. Tox.)	: 10	
Component:	Calcium dihydroxide	CAS-No. 1305-62-0
	Acute toxicity	
	Fish	
EC50	: 160 mg/l (Gambusia affinis; 96 h)	
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
Te	oxicity to daphnia and other aquatic inve	ertebrates
NOEC LC50	: 2,000 mg/l (Daphnia magna; 48 h) Guideline 202) 2,400 mg/l (Daphnia magna; 48 h) Guideline 202)	



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	algae	
EC50	: 2900 mg/l (Pseudokirchneriella subcapitata (green algae); (OECD Test Guideline 201)	72 h)
	Bacteria	
II	: Study scientifically unjustified.	
2. Persistence and d	legradability	
Component:	calcium hypochlorite CAS-No. 7	778-54-3
	Persistence and degradability	
	Persistence	
Result	: no data available	
	Biodegradability	
Result Component:	: The methods for determining the biological degradability a applicable to inorganic substances.	
component.	Persistence and degradability	043-32
	Persistence	
Result	: (Related to: Water) decomposition by hydrolysis.	
	Biodegradability	
Result	: The methods for determining the biological degradability a applicable to inorganic substances.	re not
Bioaccumulative	potential	
Component:	calcium hypochlorite CAS-No. 7	778-54-3
	Bioaccumulation	
Result	: no data available	
Component:	calcium chloride CAS-No. 10	043-52-4
	Bioaccumulation	

stry	BRENNTAG
All grades)	
: Bioaccumulation is not expected.	
	CAS-No. 7778-54-3
Mobility	
: The product is water soluble.	
calcium chloride	CAS-No. 10043-52-4
Mobility	
: The product is water soluble.	
d vPvB assessment	
: This substance/mixture contains no either persistent, bioaccumulative an persistent and very bioaccumulative higher.	nd toxic (PBT), or very
calcium hypochlorite	CAS-No. 7778-54-3
Results of PBT and vPvB assessme	ent
: The PBT or vPvB criteria of Annex > does not apply to inorganic substand	
does not apply to inorganic substant	ces. CAS-No. 10043-52-4
does not apply to inorganic substant	ces. CAS-No. 10043-52-4 ent be persistent, bioaccumulating not considered to be very
does not apply to inorganic substant calcium chloride Results of PBT and vPvB assessme : This substance is not considered to nor toxic (PBT)., This substance is n	ces. CAS-No. 10043-52-4 ent be persistent, bioaccumulating not considered to be very
does not apply to inorganic substant calcium chloride Results of PBT and vPvB assessme : This substance is not considered to nor toxic (PBT)., This substance is r persistent and very bioaccumulating ects ct	ces. CAS-No. 10043-52-4 ent be persistent, bioaccumulating not considered to be very g (vPvB).
does not apply to inorganic substant calcium chloride Results of PBT and vPvB assessme : This substance is not considered to nor toxic (PBT)., This substance is n persistent and very bioaccumulating ects	ces. CAS-No. 10043-52-4 ent be persistent, bioaccumulating not considered to be very g (vPvB).
does not apply to inorganic substant calcium chloride Results of PBT and vPvB assessme : This substance is not considered to nor toxic (PBT)., This substance is r persistent and very bioaccumulating ects ct Additional ecological information : Do not flush into surface water or sa Avoid subsoil penetration.	ces. CAS-No. 10043-52-4 ent be persistent, bioaccumulating not considered to be very g (vPvB).
does not apply to inorganic substant calcium chloride Results of PBT and vPvB assessme : This substance is not considered to nor toxic (PBT)., This substance is r persistent and very bioaccumulating ects ct Additional ecological information : Do not flush into surface water or sa	ces. CAS-No. 10043-52-4 ent be persistent, bioaccumulating not considered to be very g (vPvB).
	All grades)



	Additional eco	ological information	
Result :	no data availab	le	
Component:	calcium ch	loride	CAS-No. 10043-52-4
	Additional eco	ological information	
Result :	no data availab	le	
SECTION 13: Disposal cons	iderations		
13.1. Waste treatment method	S		
Product	disposal re	ogether with normal wast equired according to local ter drains. Contact waste	
Contaminated packaging	recycled a	taminated packagings th fter thorough and proper e, dispose of in compliance	cleaning. If recycling is not
European Waste Catalogue Number	can be ass the assign	signed for this product, as	ropean Waste Catalogue s the intended use dictates established in consultation
SECTION 14: Transport info	rmation		
1748			
14.2. UN proper shipping nam	e		
RID : CALCIUM	HYPOCHLORITE	E MIXTURE, DRY E MIXTURE, DRY E MIXTURE, DRY	
14.3. Transport hazard class(e	s)		
ADR-Class (Labels; Classification Co Identification Number; Tu code)		: 5.1 5.1; O2; 50; (E)	
RID-Class (Labels; Classification Co Identification Number) IMDG-Class	ode; Hazard	: 5.1 5.1; O2; 50 : 5.1	
(Labels; EmS)		5.1; F-H, S-Q	



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#### 14.4. Packaging group

ADR	:	
RID	:	Ш
IMDG	:	III

#### 14.5. Environmental hazards

Environmentally hazardous according to ADR	: yes
Environmentally hazardous according to RID	: yes
Marine Pollutant according to IMDG-Code	: yes

#### 14.6. Special precautions for user

Not applicable.

#### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

IMDG : Not applicable.

#### SECTION 15: Regulatory information

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

Component:	calcium hypochlorite	CAS-No. 7778-54-3
EU. Regulation EU No. 649/2012 concerning the export and import of dangerous chemicals	: ; The substance/mixture does not fall und	ler this legislation.
EU. REACH, Annex XVII, Marketing and Use Restrictions (Regulation 1907/2006/EC)	: ; The substance/mixture does not fall und	der this legislation.
EU. Regulation No 1451/2007 [Biocides], Annex I, OJ (L 325)	: EC Number: , 231-908-7; Listed	
EU. Directive 2012/18/EU (SEVESO III) Annex I	: Lower-tier requirements: 50 tonnes; Part dangerous substances; P8: Oxidising Lic Category 1, 2 or 3 Upper-tier requirements: 200 tonnes; Par dangerous substances; P8: Oxidising Lic	uids or solids, rt 1: Categories of
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#### BRENNTAG **ConnectingChemistry** HTH Briquettes (All grades) Category 1, 2 or 3 Lower-tier requirements: 100 tonnes; Part 1: Categories of dangerous substances; E1: Hazardous to the Aquatic Environment in Category Acute 1 or Chronic 1 Upper-tier requirements: 200 tonnes; Part 1: Categories of dangerous substances; E1: Hazardous to the Aquatic Environment in Category Acute 1 or Chronic 1 UK. Releases to air and Annual reporting level threshold: 10,000 kg . water (UK ISR) Component: Calcium dihydroxide CAS-No. 1305-62-0 EU. Regulation EU No. ; The substance/mixture does not fall under this legislation. : 649/2012 concerning the export and import of dangerous chemicals EU. REACH, Annex XVII, : ; The substance/mixture does not fall under this legislation. Marketing and Use **Restrictions (Regulation** 1907/2006/EC) EU. Regulation No : EC Number: , 215-137-3; Listed 1451/2007 [Biocides], Annex I, OJ (L 325) EU. Regulation No. ; Depilatories; See the text of the regulation for applicable : 1223/2009 on cosmetic exceptions or provisions. products, Annex III: List of Restricted Substances in Cosmetic Products ; Cosmetic products other than hair straighteners and depilatories; See the text of the regulation for applicable exceptions or provisions. Maximum concentration in ready for use preparation: 7 %; In hair straightening products; See the text of the regulation for applicable exceptions or provisions. EU. Directive ; The substance/mixture does not fall under this legislation. 1 2012/18/EU (SEVESO III) Annex I



Component	Coloium oblorato	CAS No. 40427 74 2
Component:	Calcium chlorate	CAS-No. 10137-74-3
EU. Regulation EC No. 689/2008	<ul> <li>Combined Nomenclature (CN) N category: Pesticide in the group Annex I, Part 1: Chemicals Sub Combined Nomenclature (CN) N Reported control actions refer to 2: Banned Chemicals Qualifying</li> </ul>	of plant protection products.; ject to Export Notification lumber(s): , 28291900; pesticide use.; Annex I, Part
EU. Directive 2012/18/EU (SEVESO III) Annex I	: Lower-tier requirements: 50 tonr dangerous substances; P8: Oxio Category 1, 2 or 3 Upper-tier requirements: 200 tor dangerous substances; P8: Oxio Category 1, 2 or 3	dising Liquids or solids, nnes; Part 1: Categories of
UK. Releases to air and water (UK ISR)	: Annual reporting level threshold:	
Component:	calcium chloride	CAS-No. 10043-52-4
EU. Regulation EU No. 649/2012 concerning the export and import of dangerous chemicals	: ; Not listed	
EU. REACH, Annex XVII, Marketing and Use Restrictions (Regulation 1907/2006/EC)	: ; The substance/mixture does no	ot fall under this legislation.
EU. Directive 2012/18/EU (SEVESO III) Annex I	: ; The substance/mixture does n	ot fall under this legislation.
UK. Releases to air and water (UK ISR)	: Annual reporting level threshold:	: 10,000 kg
15.2. Chemical safety assessme	nt	
no data available		
no data available R48650 / Version 5.0	20/22	



	eferred to under sections 2 and 3.		
H272 May	intensify fire; oxidizer.		
	nful if swallowed.		
	ses severe skin burns and eye damage.		
	ses serious eye damage.		
	Causes serious eye irritation. Very toxic to aquatic life.		
Abbreviations and Acrony	ms		
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		
EINECS	European Inventory of Existing Commercial Chemical Substance		
ELINCS	European List of Notified Chemical Substances		
GHS	Globally Harmonized System of Classification and Labelling of Chemicals		
LC50	median lethal concentration		
LOAEC	lowest observed adverse effect concentration		
LOAEL	lowest observed adverse effect level		
LOEL	lowest observed effect level		
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		
OECD	Organisation for Economic Cooperation and Development		
OEL	occupational exposure limit		
PBT	persistent, bioaccumulative and toxic		
REACH Auth. No.:	REACH Authorisation Number		
REACH AuthAppC. No.	REACH Authorisation Application Consultation Number		
PNEC	predicted no-effect concentration		
STOT	specific target organ toxicity		
SVHC	substance of very high concern		
UVCB	substance of unknown or variable composition, complex reaction products or biological materials		
vPvB	very persistent and very bioaccumulative		



#### HTH Briquettes (All grades)

#### 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 Hints for trainings	:	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. 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.