

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

## **HTH GRANULAR**

Version 2.0  
Revision Date 2011/01/17

Print Date 2011/01/17  
MSDS code: MHTH004

### **1. Identification of the substance/mixture and of the company/undertaking**

#### **1.1. Product identifier**

Trade name : HTH GRANULAR

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

Use of the Substance/Mixture : At this time we do not yet have information on identified uses. They will be included in this safety data sheet when available.

Recommended restrictions on use : At that time we do not yet have information on use restrictions. They will be included in this safety data sheet when available.

#### **1.3. Details of the supplier of the safety data sheet**

Company : Brenntag UK & Ireland  
Albion House, Rawdon Park  
GB LS19 7XX Leeds Yeadon

Telephone : 0113 3879 200  
Telefax : 0113 3879 280  
E-mail address : msds@brenntag.co.uk

#### **1.4. Emergency telephone number**

Emergency telephone number : Emergency only telephone number (open 24 hours):  
01865 407333 (N.C.E.C. Culham)

### **2. Hazards identification**

#### **2.1. Classification of the substance or mixture**

Classification according to Regulation (EC) No 1272/2008

REGULATION (EC) No 1272/2008			
Hazard class	Hazard category	Target Organs	Hazard statements
Oxidizing solids	Category 2		H272

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<b>Acute toxicity</b>	<b>Category 4</b>	<b>H302</b>
<b>Skin corrosion</b>	<b>Category 1B</b>	<b>H314</b>
<b>Specific target organ toxicity - single exposure</b>	<b>Category 3</b>	<b>H335, H336</b>
<b>Acute aquatic toxicity</b>	<b>Category 1</b>	<b>H400</b>

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

### Classification according to EU Directives 67/548/EEC or 1999/45/EC

Directive 67/548/EEC or 1999/45/EC	
Hazard symbol / Category of danger	Risk phrases
Oxidising (O)	R 8
Corrosive (C)	R34
Harmful (Xn)	R22
Dangerous for the environment (N)	R50
	R31

For the full text of the R-phrases mentioned in this Section, see Section 16.

### Most important adverse effects

- Human Health : See section 11 for toxicological information.  
No further information available.
- Physical and chemical hazards : See section 9 for physicochemical information.  
No further information available.
- Potential environmental effects : See section 12 for environmental information.  
No further information available.

## 2.2. Label elements

### Labelling according to Regulation (EC) No 1272/2008

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Hazard symbols :



Signal word :

Danger

Hazard statements :

H272	May intensify fire; oxidiser.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.

Precautionary statements

Prevention :

P221 Take any precaution to avoid mixing with combustibles.

Response :

P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.  
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.

Storage :

P405 Store locked up.

Disposal :

P501 Dispose of contents/ container in accordance with the local regulations.

### Additional Labelling:

EUH031 Contact with acids liberates toxic gas.

### Hazardous components which must be listed on the label:

- calcium hypochlorite

### 2.3. Other hazards

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No other information is available.

**3. Composition/information on ingredients****3.2. Mixtures**

Hazardous components	Amount [%]	Classification (REGULATION (EC) No 1272/2008)		Classification (67/548/EEC)
		Hazard class / Hazard category	Hazard statements	
<b>calcium hypochlorite</b>				
Index-No. : 017-012-00-7	> 50 - < 100	Ox. Sol.2	H272	O; R 8
CAS-No. : 7778-54-3		Skin Corr.1B	H314	Xn; R22
EC-No. : 231-908-7		Aquatic Acute1	H400	R31
		Acute Tox.4	H302	C; R34
		STOT SE3	H335, H336	N; R50
<b>Calcium dihydroxide</b>				
CAS-No. : 1305-62-0	< 3	Eye Dam.1	H318	Xi; R41
EC-No. : 215-137-3				
<b>calcium chloride</b>				
Index-No. : 017-013-00-2	< 2	2	H319	Xi; R36
CAS-No. : 10043-52-4				
EC-No. : 233-140-8				

For the full text of the R-phrases mentioned in this Section, see Section 16.

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

**4. First aid measures****4.1 Description of first aid measures**

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.
In case of skin contact	: Wash off immediately with soap and plenty of water. Call a

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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 symptoms and effects, both acute and delayed**

Symptoms : No further information available.

Effects : No further information available.

### **4.3 Indication of any immediate medical attention and special treatment needed**

Treatment : Treat symptomatically.  
No further information available.

## **5. Fire-fighting measures**

### **5.1. Extinguishing media**

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media : High volume water jet

### **5.2. Special hazards arising from the substance or mixture**

Specific hazards during fire fighting : The substance itself does not burn, but in contact with combustible substances it increases the risk of fire and can fuel any existing fire substantially.

In the event of fire and/or explosion do not breathe fumes.

### **5.3. Advice for firefighters**

Special protective : In the event of fire, wear self-contained breathing apparatus.

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equipment for fire-fighters : Wear personal protective equipment.

Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

**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. Do not breathe gas/fumes/vapour/spray. For personal protection see section 8.

**6.2 Environmental precautions**

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

**6.3 Methods and materials for containment and cleaning up**

Methods and materials for containment and cleaning up : Use mechanical handling equipment. Keep in suitable, closed containers for disposal.

: Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

Further information : Treat recovered material as described in the section "Disposal considerations".

**6.4 Reference to other sections**

For personal protection see section 8.

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Advice on safe handling : Keep container tightly closed. Avoid formation of respirable particles. Avoid contact with skin, eyes and clothing. Do not breathe vapours/dust. Use respirator with appropriate filter if vapours or aerosol are released. Use personal protective equipment. 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. Provide adequate ventilation. Avoid contact with the skin and the eyes.

**7.2 Conditions for safe storage, including any incompatibilities**

Requirements for storage areas and containers : Keep only in the original container.

Advice on protection against fire and explosion : Contact with combustible material may cause fire. Keep away from sources of ignition - No smoking. Oxidising

Further information on storage conditions : Keep tightly closed in a dry and cool place. Keep away from heat.

Advice on common storage : Keep away from combustible material. Keep away from food, drink and animal feedingstuffs.

**7.3 Specific end uses**

Specific use(s) : No information available.

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**8. Exposure controls/personal protection**
**8.1. Control parameters**

Component: Calcium dihydroxide	CAS-No. 1305-62-0
Other OELs	

Regulatory Basis : EU. Indicative Exposure and Directives relating to the protection of risks related to work exposure to chemical, physical, and biological agents.

Regulatory List : EU ELV

Value type : Time Weighted Average (TWA):

Value : 5 mg/m<sup>3</sup>

Remarks : Indicative

Regulatory Basis : UK. EH40 Workplace Exposure Limits (WELs)

Regulatory List : EH40 WEL

Value type : Time Weighted Average (TWA):

Value : 5 mg/m<sup>3</sup>

**8.2. Exposure controls**
**Engineering measures**

Refer to protective measures listed in sections 7 and 8.

**Personal protective equipment**
*Respiratory protection*

Advice : In case of brief exposure or low pollution use breathing filter apparatus.  
 In case of intensive or longer exposure use self-contained breathing apparatus.

*Hand protection*



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Advice : The glove material has to be impermeable and resistant to the product / the substance / the preparation.  
Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).  
Protective gloves should be replaced at first signs of wear.  
The following materials are suitable:  
polychloroprene  
Neoprene gloves

*Eye protection*

Advice : Tightly fitting safety goggles

*Skin and body protection*

Advice : impervious clothing  
Chemical resistant apron

**Environmental exposure controls**

General advice : Do not flush into surface water or sanitary sewer system.

**9. Physical and chemical properties****9.1. Information on basic physical and chemical properties**

Form : powder  
granular  
tablet

Colour : Whitish

Odour : characteristic

Odour Threshold : Currently we do not have any Information from our supplier about this.

pH : 10.5 - 11.5  
10 g/l  
20 °C

Freezing point : Currently we do not have any Information from our

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Boiling point	: supplier about this. : Currently we do not have any Information from our supplier about this.
Flash point	: Currently we do not have any Information from our supplier about this.
Evaporation rate	: Currently we do not have any Information from our supplier about this.
Flammability (solid, gas)	: Contact with combustible material may cause fire.
Upper explosion limit	: Currently we do not have any Information from our supplier about this.
Lower explosion limit	: Currently we do not have any Information from our supplier about this.
Vapour pressure	: Currently we do not have any Information from our supplier about this.
Relative vapour density	: Currently we do not have any Information from our supplier about this.
Density	: 1.3 g/cm <sup>3</sup> 20 °C
Water solubility	: partly soluble
Partition coefficient: n-octanol/water	: Currently we do not have any Information from our supplier about this.
Ignition temperature	: Currently we do not have any Information from our supplier about this.
Thermal decomposition	: 170 - 180 °C
Viscosity, kinematic	: Currently we do not have any Information from our supplier about this.
Explosivity	: Product is not explosive.
Oxidizing properties	: Currently we do not have any Information from our supplier about this.

### **9.2 Other information**

No further information available.

## **10. Stability and reactivity**

### **10.1. Reactivity**

Advice : No information available.

### **10.2. Chemical stability**

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Advice : No decomposition if stored and applied as directed.  
 No further information available.

**10.3. Possibility of hazardous reactions**

Hazardous reactions : Contact with combustible material may cause fire.Strong oxidizing agentsAmines and alcohols cause exothermic reactions.Contact with acids liberates very toxic gas.Reacts with alkalies.

**10.4. Conditions to avoid**

Conditions to avoid : > 35 °C  
 Thermal decomposition : 170 - 180 °C

**10.5. Incompatible materials**

Materials to avoid : Keep away from combustible material.

**10.6. Hazardous decomposition products**

Hazardous decomposition products : Toxic gases  
 chlorine oxides

**11. Toxicological information**
**11.1. Information on toxicological effects**

**Product: HTH GRANULAR**

**Acute toxicity**

**Oral**

Value type : Acute toxicity estimate  
 Value : 850 mg/kg  
 Method : Calculation method

**Irritation**

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### Skin

Remarks : corrosive effects

### Eyes

Remarks : corrosive effects  
Risk of serious damage to eyes.

### Sensitisation

Remarks : No sensitizing effect known.

### Further information

Other relevant toxicity information : If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the oesophagus and the stomach.

## 12. Ecological information

### 12.1. Toxicity

**Product: HTH GRANULAR**

### Acute toxicity

#### Fish

Test type : Toxicity to fish  
Species : Lepomis macrochirus (Bluegill sunfish)  
Exposure Time : 96 h  
Value type : LC50  
Value : 0.088 mg/l  
Remarks : Very toxic to fish.

Species : Oncorhynchus mykiss (rainbow trout)  
Exposure Time : 96 h

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MSDS code: MHTH004Value type : LC50  
Value : 0.16 mg/l**Toxicity to daphnia and other aquatic invertebrates.**Test type : Toxicity to daphnia  
Species : Daphnia magna (Water flea)  
Exposure time : 48 h  
Value type : LC50  
Value : 0.11 mg/l**Acute aquatic toxicity**

Remarks : Very toxic to aquatic organisms.

**12.2. Persistence and degradability****12.3. Bioaccumulative potential****12.4. Mobility in soil****12.5. Results of PBT and vPvB assessment****12.6. Other adverse effects****Product: HTH GRANULAR****Additional ecological information**Remarks : Do not flush into surface water or sanitary sewer system.  
Avoid subsoil penetration.  
Harmful effects to aquatic organisms due to pH-shift.

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### **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.
- Contaminated packaging : Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning. Packagings that cannot be cleaned are to be disposed of in the same manner as the product.
- European Waste Catalogue Number : No waste code according to the European Waste Catalogue can be assigned for this product, as the intended use dictates the assignment. The waste code is established in consultation with the regional waste disposer.

### **14. Transport information**

#### **14.1. UN number**

2880

#### **14.2. UN proper shipping name**

- ADR : CALCIUM HYPOCHLORITE, HYDRATED MIXTURE  
RID : CALCIUM HYPOCHLORITE, HYDRATED MIXTURE  
IMDG : CALCIUM HYPOCHLORITE, HYDRATED MIXTURE

#### **14.3. Transport hazard class(es)**

- ADR-Class : 5.1  
(Labels; Classification Code; Hazard identification No; Tunnel restriction code) 5.1; O2; 50; (E)
- RID-Class : 5.1  
(Labels; Classification Code; Hazard identification No) 5.1; O2; 50
- IMDG-Class : 5.1  
(Labels; EmS) 5.1; F-H, S-Q

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**14.4. Packaging group**

ADR : II

RID : II

IMDG : II

**14.5. Environmental hazards**

Labeling according to 5.2.1.8 ADR : no

Labeling according to 5.2.1.8 RID : no

Labeling according to 5.2.1.6.3 IMDG : no

Classification as environmentally  
hazardous according to 2.9.3 IMDG : no

**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.

**15. Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****15.2. Chemical Safety Assessment**

Currently we do not have any Information from our supplier about this.

**16. Other information**

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**Full text of R-phrases referred to under sections 2 and 3.**

R 8	Contact with combustible material may cause fire.
R22	Harmful if swallowed.
R31	Contact with acids liberates toxic gas.
R34	Causes burns.
R36	Irritating to eyes.
R41	Risk of serious damage to eyes.
R50	Very toxic to aquatic organisms.

**Full text of H-Statements referred to under sections 2 and 3.**

H272	May intensify fire; oxidiser.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.

**Further information**

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.



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