



SAFETY DATA SHEET

HTH Granules

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

PRODUCT NAME	HTH Granules
SUPPLIER	Univar Aquarius House 6 Midpoint Business Park Thornbury Bradford BD3 7AY +44 1274 267300 +44 1274 267306 sds@univareurope.com
SYNONYMS, TRADE NAMES	Calcium Hypochlorite, , Supershock Granules, , Fi Clor S/Fast, , Briswim S/Shock, , Easiflo, , hth® SHOCK,
APPLICATION	Water Treatment,
Emergency Contact Number (Office Hours)	+44 1274 267346
Emergency Contact Number (Outside Office Hours)	+441865 407333
SDS No.	10602

2 HAZARDS IDENTIFICATION

Contact with combustible material may cause fire. Harmful if swallowed. Causes burns. Very toxic to aquatic organisms. Contact with acids liberates toxic gas.

CLASSIFICATION (1999/45) Xn;R22. C;R34. O;R8. N;R50. R31.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Content	Classification (67/548)
CALCIUM CHLORIDE	233-140-8	10043-52-4	1-5%	Xi;R36
Calcium Hydroxide	215-137-3	1305-62-0	5-10%	Xi;R38,R41.
CALCIUM HYPOCHLORITE	231-908-7	7778-54-3	50-100%	O;R8 C;R34 Xn;R22 R31 N;R50

The Full Text for all R-Phrases are Displayed in Section 16

4 FIRST-AID MEASURES

INHALATION

Move into fresh air and keep at rest. Get medical attention.

INGESTION

Provide rest, warmth and fresh air. Immediately rinse mouth and drink plenty of water (200-300 ml). Get medical attention.

SKIN CONTACT

Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention immediately.

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EYE CONTACT

Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Get medical attention immediately. Continue to rinse.

5 FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

Water. Carbon dioxide (CO₂).

SPECIFIC HAZARDS

Chlorine.

PROTECTIVE MEASURES IN FIRE

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS

Follow precautions for safe handling described in this safety data sheet. Avoid contact with skin and eyes. Provide adequate ventilation.

ENVIRONMENTAL PRECAUTIONS

Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body.

SPILL CLEAN UP METHODS

Remove spillage with vacuum cleaner. If not possible, collect spillage with shovel, broom or the like. Flush contaminated area with plenty of water. Collect spillage in containers, seal securely and deliver for disposal according to local regulations.

7 HANDLING AND STORAGE

USAGE PRECAUTIONS

Read and follow manufacturer's recommendations. Avoid spilling, skin and eye contact. Provide good ventilation.

STORAGE PRECAUTIONS

Keep containers tightly closed. Keep in original container. Suitable containers: polyethylene. Plastic lined steel drum. Store in closed original container at temperatures between 0°C and 30°C.

STORAGE CLASS

Oxidiser storage.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

PROTECTIVE EQUIPMENT



ENGINEERING MEASURES

Provide adequate ventilation. Observe occupational exposure limits and minimize the risk of inhalation of dust.

RESPIRATORY EQUIPMENT

If ventilation is insufficient, suitable respiratory protection must be provided.

HAND PROTECTION

PVC gloves are recommended. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

EYE PROTECTION

Goggles/face shield are recommended.

OTHER PROTECTION

Wear rubber apron. Wear rubber footwear.

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HYGIENE MEASURES

Wash at the end of each work shift and before eating, smoking and using the toilet. Change work clothing daily if there is any possibility of contamination. When using do not eat, drink or smoke.

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Granular		
COLOUR	White		
ODOUR	Characteristic		
SOLUBILITY	Slightly soluble in water.		
RELATIVE DENSITY	0.8 - 1.3 20	pH-VALUE, DILUTED SOLUTION	10.5 - 11.5 1
DECOMPOSITION TEMPERATURE (°C)	170 - 180	SOLUBILITY VALUE (g/100g H₂O@20°C)	18

10 STABILITY AND REACTIVITY

STABILITY

Stable under normal temperature conditions and recommended use.

CONDITIONS TO AVOID

Avoid heat, flames and other sources of ignition. Avoid excessive heat for prolonged periods of time.

MATERIALS TO AVOID

Strong acids. Strong oxidising substances. Strong alkalis.

HAZARDOUS DECOMPOSITION PRODUCTS

Chlorine.

11 TOXICOLOGICAL INFORMATION

TOXIC DOSE 1 - LD 50 850 mg/kg (oral rat)

INHALATION

Vapours may irritate throat and respiratory system and cause coughing.

INGESTION

Harmful if swallowed.

SKIN CONTACT

Irritating to skin. Causes burns.

EYE CONTACT

May cause severe irritation to eyes. May cause chemical eye burns. Causes burns.

HEALTH WARNINGS

Severe pulmonary irritant.

MEDICAL SYMPTOMS

Pulmonary oedema, frothy sputum.

12 ECOLOGICAL INFORMATION

ECOTOXICITY

The product contains a substance which is very toxic to aquatic organisms.

LC 50, 96 Hrs, FISH mg/l 0.088

MOBILITY

The product is partly soluble in water. May spread in the aquatic environment.

ACUTE FISH TOXICITY

Very toxic to aquatic organisms.

WATER HAZARD CLASSIFICATION

WGK 2

13 DISPOSAL CONSIDERATIONS

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GENERAL INFORMATION

Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority. Do not puncture or incinerate even when empty.

DISPOSAL METHODS

Dispose of waste and residues in accordance with local authority requirements.

14 TRANSPORT INFORMATION



UK ROAD CLASS	5.1		
PROPER SHIPPING NAME	CALCIUM HYPOCHLORITE, HYDRATED or CALCIUM HYPOCHLORITE, HYDRATED MIXTURE		
UN NO. ROAD	2880	UK ROAD PACK GR.	II
ADR CLASS NO.	5.1	ADR CLASS	Class 5.1: Oxidising substances.
ADR PACK GROUP	II	TUNNEL RESTRICTION CODE	(E)
HAZARD No. (ADR)	50	ADR LABEL NO.	5.1
HAZCHEM CODE	1W	CEFIC TEC(R) NO.	51GO2-I+II+III
RID CLASS NO.	5.1	RID PACK GROUP	II
UN NO. SEA	2880	IMDG CLASS	5.1
IMDG PACK GR.	II	EMS	F-H, S-Q
UN NO. AIR	2880	AIR CLASS	5.1
AIR PACK GR.	II		

15 REGULATORY INFORMATION

LABELLING



Corrosive



Harmful



Oxidising



Dangerous for the environment

CONTAINS

CALCIUM HYPOCHLORITE

RISK PHRASES

R8	Contact with combustible material may cause fire.
R22	Harmful if swallowed.
R31	Contact with acids liberates toxic gas.
R34	Causes burns.
R50	Very toxic to aquatic organisms.

SAFETY PHRASES

S1/2	Keep locked up and out of the reach of children.
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S29	Do not empty into drains.
S36/37/39	Wear suitable protective clothing, gloves and eye/face protection.
S45	In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).

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Avoid release to the environment. Refer to special instructions/safety data sheets.

EU DIRECTIVES

Dangerous Preparations Directive 1999/45/EC.

STATUTORY INSTRUMENTS

Chemicals (Hazard Information and Packaging) Regulations.

APPROVED CODE OF PRACTICE

Safety Data Sheets for Substances and Preparations. Classification and Labelling of Substances and Preparations Dangerous for Supply.

GUIDANCE NOTES

CHIP for everyone HSG(108).

16 OTHER INFORMATION**REVISION COMMENTS**

NOTE: Lines within the margin indicate significant changes from the previous revision.

ISSUED BY

Univar Ltd

REVISION DATE 06.08.2010**REV. NO./REPL. SDS** 01**GENERATED****SDS NO.** 10602**SAFETY DATA SHEET STATUS**

Approved.

DATE 06.08.2010**SIGNATURE** Jitendra Panchal**RISK PHRASES IN FULL**

R34	Causes burns.
R31	Contact with acids liberates toxic gas.
R8	Contact with combustible material may cause fire.
R22	Harmful if swallowed.
R36	Irritating to eyes.
R38	Irritating to skin.
R41	Risk of serious damage to eyes.
R50	Very toxic to aquatic organisms.