

REVISION DATE: 06.08.2010



SAFETY DATA SHEET

HTH Tablets

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

| | |
|--|--|
| PRODUCT NAME | HTH Tablets |
| CAS-No. | 7778-54-3 |
| EU INDEX NO. | 017-012-00-7 |
| EC No. | 231-908-7 |
| SUPPLIER | Univar Aquarius House 6 Midpoint Business Park Thornbury Bradford BD3 7AY +44 1274 267300 +44 1274 267306 sds@univareurope.com |
| PRODUCT NO. | KA425P, KA4253 |
| SYNONYMS, TRADE NAMES | Calcium Hypochlorite briquettes, Easiflo, HTH Easiflo BRIQUETTE, HTH Calcium hypochlorite tablets |
| APPLICATION | Water Treatment, |
| Emergency Contact Number (Office Hours) | +44 1274 267346 |
| Emergency Contact Number (Outside Office Hours) | +441865 407333 |
| SDS No. | 11828 |

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 | 1-5% | 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

| | |
|---------------------|--------------|
| EU INDEX NO. | 017-012-00-7 |
| EC No. | 231-908-7 |
| CAS-No. | 7778-54-3 |

4 FIRST-AID MEASURES

INHALATION

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

REVISION DATE: 06.08.2010

HTH Tablets

INGESTION

Provide rest, warmth and fresh air. Immediately rinse mouth and drink plenty of water (200-300 ml). Do not induce vomiting. Get medical attention.

SKIN CONTACT

Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if any discomfort continues.

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.

UNUSUAL FIRE & EXPLOSION HAZARDS

558 Strongly oxidising (fire-intensifying) substance, corrosive.

SPECIFIC HAZARDS

Chlorine. Hydrogen chloride (HCl).

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

Collect powder using special dust vacuum cleaner with particle filter or carefully sweep into closed container. 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. Dust filter P2 (for fine dust).

REVISION DATE: 06.08.2010

HTH Tablets

HAND PROTECTION

Use protective gloves. Neoprene. Polyvinyl chloride (PVC). 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.

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 | Pellets | | |
| COLOUR | White | | |
| ODOUR | Characteristic | | |
| SOLUBILITY | Slightly soluble in water. | | |
| RELATIVE DENSITY | 1.3 20 | pH-VALUE, DILUTED SOLUTION | 10.5 - 11.0 @ 1% |
| DECOMPOSITION TEMPERATURE (°C) | 170 - 180 | | |

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

Flammable/combustible material. 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. May cause chemical burns in mouth, oesophagus and stomach.

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.

REVISION DATE: 06.08.2010

HTH Tablets

ACUTE FISH TOXICITY

Very toxic to aquatic organisms.

WATER HAZARD CLASSIFICATION

WGK 2

13 DISPOSAL CONSIDERATIONS

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, DRY or CALCIUM HYPOCHLORITE MIXTURE, DRY | | |
| UN NO. ROAD | 1748 | UK ROAD PACK GR. | III |
| ADR CLASS NO. | 5.1 | ADR CLASS | Class 5.1: Oxidising substances. |
| ADR PACK GROUP | III | TUNNEL RESTRICTION CODE | (E) |
| HAZARD No. (ADR) | 50 | ADR LABEL NO. | 5.1 |
| HAZCHEM CODE | 1W | RID CLASS NO. | 5.1 |
| RID PACK GROUP | III | UN NO. SEA | 1748 |
| IMDG CLASS | 5.1 | IMDG PACK GR. | III |
| UN NO. AIR | 1748 | AIR CLASS | 5.1 |
| AIR PACK GR. | III | | |

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. |

REVISION DATE: 06.08.2010

HTH Tablets

| | |
|-----------|---|
| 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). |
| S61 | 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.

REVISION DATE 06.08.2010**REV. NO./REPL. SDS** 01**GENERATED****SDS NO.** 11828**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. |