

# SAFETY DATA SHEET

# Bromochloro 5, 5 Dimethylhydantoin

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

**PRODUCT NAME** Bromochloro 5, 5 Dimethylhydantoin

SYNONYMS, TRADE NAMES Halogene..., , Halobrom.., , BCDMH, , 2, 4 Imidazolidinedione,

APPLICATION Biocides for water treatment

SUPPLIER Univar

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**Emergency Contact Number** 

(Office Hours)

SDS No. H060

+44 1274 377070

#### 2 HAZARDS IDENTIFICATION

Harmful if swallowed. Causes burns. May cause sensitisation by skin contact. Very toxic to aquatic organisms.

Contact with acids liberates toxic gas.

CLASSIFICATION Xn;R22. C;R34. N;R50. R31, R43.

# 3 COMPOSITION/INFORMATION ON INGREDIENTS

**EC No.** 251-171-5 **CAS-No.** 32718-18-6

## 4 FIRST-AID MEASURES

## INHALATION

Remove victim immediately from source of exposure. Get medical attention.

## INGESTION

Immediately give a couple of glasses of water or milk, provided the victim is fully conscious. Get medical attention immediately!

#### 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. Obtain medical attention and bring these instructions.

# **5 FIRE-FIGHTING MEASURES**

# Bromochloro 5, 5 Dimethylhydantoin

#### **EXTINGUISHING MEDIA**

Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.

#### **UNUSUAL FIRE & EXPLOSION HAZARDS**

May ignite other combustible materials. Dust may form explosive mixture with air. OXIDISING! Risk of explosion if heated. Fire causes formation of toxic gases.

#### SPECIFIC HAZARDS

Hydrogen bromide (HBr). Hydrogen chloride (HCl). Oxides of: Nitrogen.

#### PROTECTIVE MEASURES IN FIRE

Wear full protective clothing.

#### **6 ACCIDENTAL RELEASE MEASURES**

#### PERSONAL PRECAUTIONS

Wear protective clothing as described in Section 8 of this safety data sheet.

#### **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

Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Remove sources of ignition. Absorb with inert, damp, non-combustible material, then flush area with 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 contact with skin and eyes. Keep away from heat, sparks and open flame. Eliminate all sources of ignition.

#### STORAGE PRECAUTIONS

Keep away from heat, sparks and open flame. Keep containers tightly closed. Keep in original container. Oxidising material - Keep away from flammable and combustible materials.

## 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

## PROTECTIVE EQUIPMENT









# RESPIRATORY EQUIPMENT

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

## HAND PROTECTION

PVC gloves are recommended.

#### **EYE PROTECTION**

Wear approved safety goggles.

#### OTHER PROTECTION

Wear rubber apron. Wear rubber footwear.

## 9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE Pellets Powder, dust

COLOUR White

**REVISION DATE: 25.06.2009** 

# Bromochloro 5, 5 Dimethylhydantoin

ODOUR Mild

**SOLUBILITY** Slightly soluble in water. Hydrolysis in water

MELTING POINT (°C) 156-162 VAPOUR PRESSURE 3.8 mPa 25°C

DECOMPOSITION >160 SOLUBILITY VALUE (g/100g 0.2

TEMPERATURE (°C) H2O@20°C)

#### 10 STABILITY AND REACTIVITY

#### STABILITY

Stable under normal temperature conditions and recommended use.

#### CONDITIONS TO AVOID

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

contact with: Water, moisture.

#### HAZARDOUS POLYMERISATION

Will not polymerise.

#### MATERIALS TO AVOID

Strong oxidising substances. Strong alkalis. Flammable/combustible material.

#### HAZARDOUS DECOMPOSITION PRODUCTS

Hydrogen bromide (HBr). Hydrogen chloride (HCl). Oxides of: Nitrogen.

#### 11 TOXICOLOGICAL INFORMATION

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

 TOXIC CONC. - LC 50
 1.1 mg/l/4h (inh-rat)

INHALATION

Irritating to respiratory system.

## INGESTION

Swallowing concentrated chemical may cause severe internal injury.

#### SKIN CONTACT

May cause serious chemical burns of the skin.

#### **EYE CONTACT**

May cause severe irritation to eyes. Risk of serious damage to eyes.

## 12 ECOLOGICAL INFORMATION

LC 50, 96 Hrs, FISH mg/l 0.65 EC 50, 48 Hrs, DAPHNIA, mg/l 0.87

#### MOBILITY

The product has poor water-solubility.

# WATER HAZARD CLASSIFICATION

WGK 2

#### 13 DISPOSAL CONSIDERATIONS

# GENERAL INFORMATION

When handling waste, consideration should be made to the safety precautions applying to handling of the product.

#### **DISPOSAL METHODS**

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

## 14 TRANSPORT INFORMATION

# Bromochloro 5, 5 Dimethylhydantoin



UK ROAD CLASS 5.1

PROPER SHIPPING NAME
OXIDISING SOLID, CORROSIVE, N.O.S.(Bromochloro-5,

5-dimethylimidazolidine-2, 4-dione (BCDMH))

UN NO. ROAD 3085 UK ROAD PACK GR. III

ADR CLASS NO. 5.1 ADR CLASS Class 5.1: Oxidising

substances.

ADR PACK GROUP Ш HAZARD No. (ADR) 58 ADR LABEL NO. **HAZCHEM CODE** 5.1 & 8 1W CEFIC TEC(R) NO. 51GOC2-I+II+III RID CLASS NO. 5.1 **RID PACK GROUP** UN NO. SEA 3085 Ш IMDG CLASS IMDG PACK GR. 5.1 Ш

 EMS
 F-A, S-Q
 MFAG
 See Guide

 UN NO. AIR
 3085
 AIR CLASS
 5.1

 AIR SUB CLASS
 8
 AIR PACK GR.
 III

## 15 REGULATORY INFORMATION

## **LABELLING**







Dangerous for the environment

## **RISK PHRASES**

R22 Harmful if swallowed.

R31 Contact with acids liberates toxic gas.

R34 Causes burns.

R43 May cause sensitisation by skin contact.

R50 Very toxic to aquatic organisms.

## SAFETY PHRASES

S2 Keep out of the reach of children

S13 Keep away from food, drink and animal feeding stuffs.

S20/21 When using do not eat, drink or smoke.

S26 In case of contact with eyes, rinse immediately with plenty of water and

seek medical advice.

S28 After contact with skin, wash immediately with plenty of water.

S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

S41 In case of fire and/or explosion do not breathe fumes.

S45 In case of accident or if you feel unwell, seek medical advice

immediately (show label where possible).

S60 This material and its container must be disposed of as hazardous

waste.

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S61 Avoid release to the environment. Refer to special instructions/safety

data sheets.

# 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 DATE 25.06.2009

REV. NO./REPL. SDS 03

**GENERATED** 

SDS NO. H060

SAFETY DATA SHEET STATUS

Approved.

DATE 13.06.2008

SIGNATURE Jitendra Panchal

SIGNATURE 2 Gillian Sutton