

# Material Safety Data Sheet

## Section 1 - Identification of the substance/preparation and company

Trade Name	Aquachem 117
Chemical Name/Synonyms	bromine-chlorine hydantoin
Formula	mixture
UNNO	3085
Name of Company	Aqueous Logic
Address	248 Sutton Common Road Sutton, Surrey SM3 9PW
Telephone no.	(0208) 288-0128

## Section 2 - Composition/information on ingredients

Substance	% composition	risk phrases	CAS number
1-bromo-3-chloro-5,5-dimethyl hydantoin	93-99%	C, O, R22, R31, R34, R8	32718-18-6

## Section 3 - Hazards Identification

### Hazards

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

Adverse effects	Skin	Irritation and burns on prolonged contact are possible.
	Eyes	Contact will severely irritate. Tissue damage possible.
	Ingestion	Not available at this time.
	Inhalation	Inhalation of dust will lead to irritation of the nose, throat and lungs, shortness of breath, headache, nausea.

As part of our commitment to Responsible Care, we recommend that all purchased chemical products should be only discharged in dilute form to drains that are connected to the sanitary sewer to insure minimal environmental impact. All the ingredients within this product can be degraded/ safely absorbed by the environment.

## Section 4 - First Aid measures

Skin	Wash affected area with soap and water. Remove and wash contaminated clothing. Consult doctor if irritation persists.
Eyes	Immediately flush with water for at least 15 mins. Get medical attention.
Ingestion	Drink raw egg white or milk followed by an emetic (tablespoon of mustard in a glass of warm water). Drink plenty of water. Do not give victim anything to drink if unconscious. Obtain immediate medical attention.

Inhalation            Remove to fresh air. Give artificial respiration if necessary. Seek medical attention if needed.

#### Section 5 - Fire-fighting measures

N.B. Product is non-flammable.

Suitable extinguishing media	carbon dioxide, dry chemical, water spray
Special protective equipment	self contained breathing apparatus and full protective equipment
Special exposure hazards	Although the product is non-flammable, it emits toxic fumes in a fire. Either remove containers from fire or keep cool with a water spray. Avoid breathing fumes.

#### Section 6 - Accidental release measures

Wear a MSHA/NIOSH approved respirator. Wear chemical resistant gloves. If exposed to material remove and wash all contaminated clothing. Wash skin with soap and water. Keep dust to a minimum.

#### Section 7 - Handling and storage

Handling	Avoid contact with skin and eyes. Do not inhale or ingest.
Storage	Store in a cool, dry place away from combustible material such as paper, wood, oil, solvents.

*We recommend that when handling all chemicals, the minimum precautions are the wearing of gloves and goggles. Efforts to minimize contact with chemicals should always be made.*

#### Section 8 - Exposure controls/personal protection

Protective measures -	Respiratory protection	wear respirator in dusty conditions
	Hand protection	butyl/rubber gloves
	Eye protection	goggles
	Skin protection	apron
	Wash contaminated clothing before reuse.	

#### Section 9 - Physical and chemical properties

Appearance	white/off white tablets
Odour	faint halogen odour
pH	N/A
Boiling point	decomposes
Melting point	decomposes
Flammability	non flammable
Density	1.8 - 2.0 g/ml
Solubility in water	0.2%
Solubility in benzene	2.5%

### Section 10 - Stability and reactivity

Stability            stable  
Conditions to avoid        temperatures above 160 C  
Materials to avoid        combustible materials such as paper, wood, oil, solvents  
Hazardous decomposition products        Combustion generates toxic fumes of hydrogen bromide, bromine gas, nitrogen oxides, hydrogen chloride.

### Section 11 - Toxicological information

Contact with moist skin will cause severe burns. Contact with dry skin will cause superficial burns after prolonged contact. Sensitisation possible.  
Contact with eyes will severely irritate. Tissue damage possible.  
Inhalation of dust will lead to irritation of nose, throat and lungs, shortness of breath, headache, nausea.

### Section 12 - Ecological information

This product is toxic to fish Do not discharge to waterways.

### Section 13 - Disposal considerations

Material can be incinerated according to local, state and federal regulations. Large amounts should be given to licensed disposal agency. Waste hazard classification two.

### Section 14 - Transport information

UNNO 3085    Packing Group 2    Class 5.1

### Section 15 - Regulatory information

R8                    Contact with combustible material may cause fire.  
R22                  Harmful if swallowed.  
R31                  Contact with acids liberates toxic gas.  
R34                  Causes burns  
S8                    Keep container dry  
S26                  In case of contact with eyes, rinse immediately with plenty of water and seek medical attention.  
S-28                 After contact with skin, wash immediately with plenty of water.  
S-36/37/39         Wear suitable protective clothing, gloves and eye/face protection  
S-41                 In case of fire and/or explosion, do not breath fumes.  
S45                 In case of accident or if you feel unwell seek medical advice. (show the label where possible)

Section 16 - Other information

Keep container tightly closed when not in use

This product is an oxidiser.

**KEEP OUT OF THE REACH OF CHILDREN**

The information on this Material Safety Data Sheet reflects the latest information and data that we have on hazards, properties, and handling of this product under recommended conditions of use. Any use of this product or method of application which is not described in the Product Data Sheet or on the Product Label is the responsibility of the user.