



## MATERIAL SAFETY DATA SHEET

### Bellacide 355

#### 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

<b>PRODUCT NAME</b>	Bellacide 355
<b>PRODUCT NO.</b>	BWA00110723
<b>PRODUCT USE</b>	Industrial Water Treatment
<b>SUPPLIER</b>	BWA Water Additives US LLC 1979 Lakeside Parkway Suite 925 Tucker GA 30084 TEL (800) 600-4523 CUSTOMER SERVICE
<b>EMERGENCY TELEPHONE</b>	Chemtrec Phone: 1-800-424-9300
<b>IDENTIFICATION No.</b>	1760

#### 2 HAZARDS IDENTIFICATION

##### POTENTIAL HEALTH EFFECTS

##### INHALATION

May cause irritation to the respiratory system.

##### INGESTION

Harmful if swallowed.

##### SKIN CONTACT

Causes burns.

##### EYE CONTACT

Causes burns.

##### HEALTH WARNINGS

This substance is corrosive.

##### ROUTE OF ENTRY

Skin and/or eye contact. Ingestion. Inhalation.

##### TARGET ORGANS

Eyes. Skin.

#### 3 COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Weight
Tributyl tetradecyl phosphonium chloride	279-808-2	81741-28-8	5-10%

#### 4 FIRST-AID MEASURES

##### INHALATION

Remove victim immediately from source of exposure. Provide rest, warmth and fresh air. Get medical attention if any discomfort continues.

##### INGESTION

NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! DO NOT INDUCE VOMITING! Immediately rinse mouth and provide fresh air. Get medical attention.

##### SKIN CONTACT

Remove victim immediately from source of exposure. Immediately remove contaminated clothing. Wash skin thoroughly with soap and water for several minutes. Get medical attention if any discomfort continues.

##### EYE CONTACT

Remove victim immediately from source of exposure. Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Contact physician if irritation persists.

## Bellacide 355

### 5 FIRE-FIGHTING MEASURES

#### EXTINGUISHING MEDIA

Fire can be extinguished using: Carbon dioxide (CO<sub>2</sub>). Foam. Dry chemicals, sand, dolomite etc. Water spray, fog or mist.

#### SPECIAL FIRE FIGHTING PROCEDURES

Move container from fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. Keep run-off water out of sewers and water sources. Dike for water control.

#### UNUSUAL FIRE & EXPLOSION HAZARDS

No unusual fire or explosion hazards noted.

#### SPECIFIC HAZARDS

Fire creates: Toxic gases/vapors/fumes of Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Oxides of: Phosphorus. Chlorine.

#### PROTECTIVE MEASURES IN FIRE

Leave danger zone immediately. 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. For personal protection, see section 8.

#### ENVIRONMENTAL PRECAUTIONS

Avoid release to the environment. To prevent release, place container with damaged side up.

#### SPILL CLEAN UP METHODS

Should be prevented from entering drains. Absorb in vermiculite, dry sand or earth and place into containers. Collect and reclaim or dispose in sealed containers in licensed waste. Containers with collected spillage must be properly labelled with correct contents and hazard symbol.

### 7 HANDLING AND STORAGE

#### HANDLING

Avoid spilling, skin and eye contact. Observe good industrial hygiene practices.

#### STORAGE

Do NOT use container made of: Carbon steel. Store separated from: Alkalies. Reducing Agents. Keep containers tightly closed. Keep separate from food, feedstuffs, fertilizers and other sensitive material. Store at moderate temperatures in dry, well ventilated area. Protect from light, including direct sunrays.

### 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

#### INGREDIENT COMMENTS

No exposure limits noted for ingredient(s).

#### PROCESS CONDITIONS

Provide eyewash station.

#### PROTECTIVE EQUIPMENT



#### ENGINEERING MEASURES

Observe Occupational Exposure Limits and minimize the risk of inhalation of vapors. Provide adequate ventilation.

#### RESPIRATORY EQUIPMENT

No specific recommendation made, but respiratory protection must be used if the general level exceeds the Recommended Occupational Exposure Limit

#### HAND PROTECTION

Selection of a suitable glove depends on work conditions and whether the product is present on its own or in combination with other substances. Gloves should be replaced immediately if signs of degradation are observed. It has been found that gloves made from rubber, neoprene or PVC provide short-term splash protection.

## Bellacide 355

### EYE PROTECTION

Wear approved safety goggles. Use face shield in case of splash risk.

### HYGIENE MEASURES

No specific hygiene procedures noted, but good personal hygiene practices are always advisable, especially when working with chemicals.

### SKIN PROTECTION

Wear apron or protective clothing in case of contact.

## 9 PHYSICAL AND CHEMICAL PROPERTIES

<b>APPEARANCE</b>	Liquid
<b>COLOR</b>	Colorless
<b>ODOR</b>	Slight odor
<b>PHYSICAL DATA COMMENTS</b>	Information given concerns the concentrated solution.
<b>BOILING POINT (°C)</b>	100
<b>pH-VALUE, CONC. SOLUTION</b>	6 - 8

## 10 STABILITY AND REACTIVITY

### STABILITY

Stable under normal temperature conditions and recommended use.

### HAZARDOUS DECOMPOSITION PRODUCTS

Fire creates: Toxic gases/vapors/fumes of: Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Oxides of: Phosphorus. Chlorine.

## 11 TOXICOLOGICAL INFORMATION

**TOXIC DOSE 1 - LD 50** 1002 mg/kg (oral rat)

**TOXIC DOSE 2 - LD 50** 4000 mg/kg (ipr-rat)

### TOXICOLOGICAL INFORMATION

Ames Test negative

### INHALATION

May cause irritation to the respiratory system.

### INGESTION

Harmful if swallowed.

### SKIN CONTACT

Causes burns.

### EYE CONTACT

Causes burns.

### HEALTH WARNINGS

This substance is corrosive.

## 12 ECOLOGICAL INFORMATION

### ECOTOXICITY

The product contains a substance which is toxic to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

**LC 50, 96 Hrs, FISH mg/l** 0.58

**EC 50, 48 Hrs, DAPHNIA, mg/l** 0.25

### ECOLOGICAL INFORMATION

Ecotoxicological information based on the individual components properties.

## 13 DISPOSAL CONSIDERATIONS

### WASTE MANAGEMENT

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

### DISPOSAL METHODS

Absorb in vermiculite or dry sand, dispose in licensed hazardous waste. Liquid material should be incinerated. Material absorbed onto sand or earth should be disposed of as solid waste in accordance with local regulations. Empty packaging may contain product residues and due consideration should be given prior to disposal.

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## 14 TRANSPORT INFORMATION



<b>DOT PROPER SHIPPING NAME</b>	CORROSIVE LIQUID N.O.S.(Contains Tributyl tetradecyl phosphonium chloride)
<b>TDG SHIPPING NAME</b>	CORROSIVE LIQUID N.O.S.(Contains Tributyl tetradecyl phosphonium chloride)
<b>IDENTIFICATION No.</b>	1760
<b>DOT HAZARD CLASS</b>	8
<b>DOT PACKING GROUP</b>	II
<b>U.S DOT HAZARD LABEL</b>	Corrosive
<b>UN NO. SEA</b>	1760
<b>IMDG CLASS</b>	8
<b>IMDG PACK GR.</b>	II
<b>EMS</b>	F-A, S-B
<b>MARINE POLLUTANT</b>	No.
<b>UN NO. AIR</b>	1760
<b>AIR CLASS</b>	8
<b>AIR PACK GR.</b>	II
<b>TDG CLASS</b>	8
<b>TDG PACKING GROUP</b>	II

## 15 REGULATORY INFORMATION

### INVENTORIES

COMPONENT	CAN	US	EU	AUS	JAP	KOR	CHN	PHLP
Tributyl tetradecyl phosphonium chloride	DSL	Yes						

COMPONENT	CAS	CA	FL	MA	MN	NJ	PA	RI
Tributyl tetradecyl phosphonium chloride	81741-28-8	No	No	No	No	No	No	No

### REGULATORY STATUS (US)

TSCA: The ingredients of this product are on the TSCA Inventory. PROPOSITION 65: This product does not contain chemicals considered by the State of California's Safe Drinking Water and Toxic Enforcement Act of 1986 as causing cancer or reproductive toxicity and for which warnings are now required. SECTION 313: This product does not contain toxic chemical subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR Part 372.

### REGULATORY REFERENCES

29 CFR 1910.1010 Federal Regulations (OSHA Standard).

### ENVIRONMENTAL LISTING

EPA REGISTRATION NUMBER:83451-15

## WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM -WHIMIS

### LABEL(S) FOR SUPPLY



Corrosive Material.



Materials Causing Other Toxic Effects.

# Bellacide 355

## CONTROLLED PRODUCT CLASSIFICATION

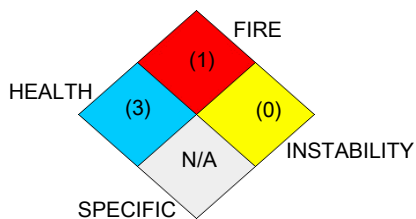
Canadian WHMIS Classification E D2B

## 16 OTHER INFORMATION

### HAZARDOUS MATERIAL INFORMATION SYSTEM (HMIS)

HEALTH	3
FLAMABILITY	1
REACTIVITY	0
PERSONAL PROTECTION	D

### NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)



### REVISION COMMENTS

New company name & new format

#### ISSUED BY

G.B.

#### REVISION DATE

24th October 2007

#### VERSION No.

1

#### SAFETY DATA SHEET STATUS

Approved.

### DISCLAIMER

For safety reasons it is IMPERATIVE that customers:-

1. Ensure that all those within their control who use the products are supplied with all relevant information contained within the Safety Data Sheet and Technical Bulletin concerning the applications for which the product is designed and any instructions and warnings contained therein.
2. Consult BWA Water Additives before using or supplying the product for any other applications. The information contained herein is based on the present state of our knowledge and is intended to describe our products from the point of view of safety requirements. It should not therefore be construed as guaranteeing specific properties.