



## MATERIAL SAFETY DATA SHEET

### BELCLENE 440

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

**PRODUCT NAME** BELCLENE 440  
**CHEMICAL NAME** Derivative of Acrylic acid Copolymer.  
**PRODUCT NO.** 100834, 100835, 100957, 100958  
**PRODUCT USE** Scale inhibitor  
**SUPPLIER** BWA Water Additives US LLC  
1979 Lakeside Parkway  
Suite 925, Tucker, GA30084  
USA  
T: 1 800.600.4523  
T: 1 678.802.3050  
(Technical/commercial enquiries)  
E: msds@wateradditives.com  
**EMERGENCY TELEPHONE** Chemtrec Phone: 1-800-424-9300  
**IDENTIFICATION No.** 3265

#### 2 HAZARDS IDENTIFICATION

##### POTENTIAL HEALTH EFFECTS

##### INHALATION

May cause irritation to the respiratory system.

##### INGESTION

May cause discomfort if swallowed. May cause stomach pain or vomiting.

##### SKIN CONTACT

Non Irritant. Not a skin sensitizer.

##### EYE CONTACT

Irritating to eyes.

##### HEALTH WARNINGS

No specific health warnings noted.

#### 3 COMPOSITION/INFORMATION ON INGREDIENTS

##### COMPOSITION COMMENTS

Aqueous solution of Acrylic acid copolymer.

\* HMIRC Registration Number 8626. The filing date associated with this product is: May 30, 2012.

#### 4 FIRST-AID MEASURES

##### NOTES TO THE PHYSICIAN

Treat Symptomatically.

##### INHALATION

Provide fresh air, warmth and rest, preferably in a comfortable upright sitting position. Get medical attention if any discomfort continues.

##### INGESTION

NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs. Rinse mouth thoroughly. Get medical attention.

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### SKIN CONTACT

Immediately remove contaminated clothing. Rinse immediately with plenty of water. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after washing.

### EYE CONTACT

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.

## 5 FIRE-FIGHTING MEASURES

### EXTINGUISHING MEDIA

The product is non-combustible. Use: Water spray, fog or mist. Foam, carbon dioxide or dry powder.

### 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

Fire causes formation of toxic gases.

### SPECIFIC HAZARDS

Fire creates: Toxic gases/vapors/fumes of: Carbon Monoxide (CO) Carbon dioxide (CO<sub>2</sub>). The product is non-combustible. If heated, irritating vapors may be formed.

### 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 material 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 chemical hygiene practices. Do not handle broken packages without protective equipment.

### STORAGE

Store in tightly closed original container in a dry, cool and well-ventilated place. Protect from freezing and direct sunlight. Store separated from: Alkalis. Reducing Agents. Do NOT use container made of: Carbon steel.

### STORAGE CLASS

Corrosive storage.

## 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

### PROCESS CONDITIONS

Provide eyewash station.

### PROTECTIVE EQUIPMENT



### ENGINEERING MEASURES

Provide adequate ventilation.

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### RESPIRATORY EQUIPMENT

No specific recommendation made, but respiratory protection may still be required under exceptional circumstances when excessive air contamination exists.

### 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. Use protective gloves made of: Neoprene, nitrile, polyethylene or PVC. Be aware that the liquid may penetrate the gloves. Frequent change is advisable.

### EYE PROTECTION

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

### OTHER PROTECTION

Wear appropriate clothing to prevent repeated or prolonged skin contact.

### HYGIENE MEASURES

No specific hygiene procedures noted, but good personal hygiene practices are always advisable, especially when working with chemicals. Wash contaminated clothing before reuse.

### SKIN PROTECTION

Wear apron or protective clothing in case of splashes.

## 9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Liquid
COLOR	Light (or pale). Yellow.
SOLUBILITY	Soluble in water.
BOILING POINT (°C)	100 - 102 @ 760 mm Hg
pH-VALUE, CONC.	< 2
SOLUTION	
PARTITION COEFFICIENT (N-Octanol/Water)	<0

## 10 STABILITY AND REACTIVITY

### STABILITY

Stable under normal temperature conditions and recommended use.

### CONDITIONS TO AVOID

Avoid excessive heat for prolonged periods of time.

### HAZARDOUS POLYMERISATION

Will not polymerise.

### MATERIALS TO AVOID

Strong alkalis. Organic nitrites. Inorganic nitrites. Chemically active metals.

### HAZARDOUS DECOMPOSITION PRODUCTS

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

## 11 TOXICOLOGICAL INFORMATION

TOXIC DOSE 1 - LD 50	>5000 mg/kg (oral rat)
TOXIC DOSE 2 - LD 50	>2000 mg/kg (skin rat)

### TOXICOLOGICAL INFORMATION

Ames Test negative

### INHALATION

May cause irritation to the respiratory system.

### INGESTION

May cause discomfort if swallowed. May cause stomach pain or vomiting.

### SKIN CONTACT

Non Irritant. Not a skin sensitizer.

### EYE CONTACT

Irritating to eyes.

## BELCLENE 440

### HEALTH WARNINGS

No specific health warnings noted.

## 12 ECOLOGICAL INFORMATION

### ECOTOXICITY

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

LC 50, 96 Hrs, FISH mg/l >100

EC 50, 48 Hrs, DAPHNIA, mg/l >100

IC 50, 72 Hrs, ALGAE, mg/l <100

### MOBILITY

The product is miscible with water. May spread in water systems.

### BIOACCUMULATION

The product does not contain any substances expected to be bio-accumulating.

### DEGRADABILITY

Not readily biodegradable

## 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 and dispose of at a licenced hazardous waste collection point.

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.

## 14 TRANSPORT INFORMATION



<b>TDG SHIPPING NAME</b>	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S., (Contains derivative of acrylic acid copolymer.)
<b>CLASSIFICATION CODE (ADR)</b>	C3
<b>ENVIRONMENTALLY HAZARDOUS SUBSTANCE/MARINE POLLUTANT</b>	No.
<b>IDENTIFICATION No.</b>	3265
<b>TUNNEL RESTRICTION CODE</b>	(E)
<b>DOT HAZARD CLASS</b>	8
<b>DOT PACKING GROUP</b>	III
<b>U.S DOT HAZARD LABEL</b>	Corrosive
<b>UN NO. SEA</b>	3265
<b>IMDG CLASS</b>	8
<b>IMDG PACK GR.</b>	III

## BELCLENE 440

EMS F-A, S-B  
UN NO. AIR 3265  
AIR CLASS 8  
AIR PACK GR. III  
TDG CLASS 8  
TDG PACKING GROUP III

### 15 REGULATORY INFORMATION

#### INVENTORIES

COMPONENT	CAN	US	EU	AUS	JAP	KOR	CHN	PHLP
Derivative Acrylic Acid Polymer	DSL	Yes.	EINECS	Yes.	Yes.	Yes.	Yes.	Yes.

COMPONENT	TSCA 12(b) Export Notification
Derivative Acrylic Acid Polymer	No.

#### US FEDERAL REGULATIONS

COMPONENT	SARA 302-TPC	CERCLA-RQ	SARA 313
Derivative Acrylic Acid Polymer	No	No	No.

#### CLEAN AIR ACT

COMPONENT	CAA Accidental Release Prevention
Derivative Acrylic Acid Polymer	No

#### US STATE REGULATIONS

COMPONENT	FDA ESSENTIAL CHEMICAL	FDA PRECURSOR
Derivative Acrylic Acid Polymer	No.	No.

#### US STATE REGULATIONS

COMPONENT	CAS	CA	FL	MA	MN	NJ	PA	RI
Derivative Acrylic Acid Polymer		No	No	No	No	No	No	No

#### REGULATORY STATUS (US)

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.

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.

TSCA: The ingredients of this product are on the TSCA Inventory.

#### REGULATORY REFERENCES

29 CFR 1910.1010 Federal Regulations (OSHA Standard).

### WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM -WHMIS

#### LABEL(S) FOR SUPPLY



Materials Causing Other  
Toxic Effects.



Corrosive Material.

#### CONTROLLED PRODUCT CLASSIFICATION

Canadian WHMIS Classification D2B E

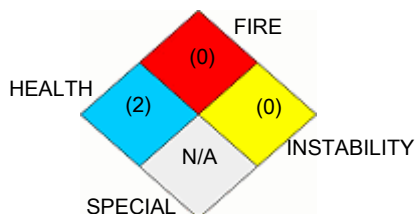
### 16 OTHER INFORMATION

#### HAZARDOUS MATERIAL INFORMATION SYSTEM (HMIS)

## BELCLENE 440

HEALTH	2
FLAMMABILITY	0
PHYSICAL	0
PERSONAL PROTECTION	C

### NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)



### GENERAL INFORMATION

Classified as corrosive class 8 for transportation on the basis of its effect on mild steel and/or aluminium.

For advice on chemical emergencies, spillages, fires or first aid in relation to this product please contact the relevant emergency number below :

EU/English Speakers - +44 (0) 1235 239 670 (NCEC)

Arabic Speakers - +44 (0) 1235 239 671

Asia/Pacific countries - +65 3158 1074

For emergencies within China - +86 10 5100 3039

### REVISION COMMENTS

General Revision of SDS

### ISSUED BY

S.G.

REVISION DATE August 30th, 2012

VERSION No. 4

SDS NO. 10878

### MATERIAL 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.