

**MATERIAL SAFETY DATA SHEET****Belclene 400****1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING**

PRODUCT NAME Belclene 400
PRODUCT NO. BWA00110271
PRODUCT USE Scale/deposit control additive
SUPPLIER BWA Water Additives US LLC
1979 Lakeside Parkway
Suite 925, Tucker. GA30084.
TEL (800) 600-4523
CUSTOMER SERVICE
(For all technical and commercial enquiries.)
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

Liquid may irritate skin.

Not a skin sensitizer.

EYE CONTACT

Irritating to eyes.

ROUTE OF ENTRY

Skin and/or eye contact. Ingestion. Inhalation.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Weight
Phosphinocarboxylic acid.		110224-99-2	30-60%

COMPOSITION COMMENTS

Aqueous solution of phosphinocarboxylic acid

4 FIRST-AID MEASURES**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! Rinse mouth thoroughly. Get medical attention.

SKIN CONTACT

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

Belclene 400

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

Use: Carbon dioxide or dry powder. Foam. 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 (CO₂). Oxides of: Phosphorus. Sulphur. Nitrogen.

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 labeled with correct contents and hazard symbol.

7 HANDLING AND STORAGE

HANDLING

Avoid spilling, skin and eye contact.

STORAGE

Store separated from: Alkalis. Reducing Agents. Do NOT use container made of: Carbon steel. Keep containers tightly closed.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

INGREDIENT COMMENTS

No exposure limits noted for ingredient(s).

PROCESS CONDITIONS

Provide eyewash station.

PROTECTIVE EQUIPMENT



ENGINEERING MEASURES

All handling to take place in well-ventilated area.

No specific ventilation requirements noted, except this product must not be used in a confined space without good ventilation.

RESPIRATORY EQUIPMENT

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

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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.

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 splashes.

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Liquid		
COLOR	Light (or pale) Yellow		
ODOR	Slight odor		
SOLUBILITY	Miscible with water.		
BOILING POINT (°C)	103 - 105	MELTING POINT (°C)	(-6) - (-10)
RELATIVE DENSITY	1.22 - 1.26 @ 20 (c)	pH-VALUE, CONC. SOLUTION	2 - 3
VISCOSITY	100 - 330 cSt @ 25 (c)	PARTITION COEFFICIENT (N-Octanol/Water)	<0

10 STABILITY AND REACTIVITY

STABILITY

Stable under normal temperature conditions and recommended use.

CONDITIONS TO AVOID

Reacts with alkalis and generates heat.

MATERIALS TO AVOID

Strong alkalis.

HAZARDOUS DECOMPOSITION PRODUCTS

Fire creates: Toxic gases/vapors/fumes of: Carbon monoxide (CO). Carbon dioxide (CO₂). Oxides of: Phosphorus. Sulfur. Nitrogen.

11 TOXICOLOGICAL INFORMATION

TOXIC DOSE 1 - LD 50 >10000 mg/kg (oral rat)

INHALATION

May cause irritation to the respiratory system.

INGESTION

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

SKIN CONTACT

Liquid may irritate skin. Not a skin sensitizer.

EYE CONTACT

Irritating to eyes.

12 ECOLOGICAL INFORMATION

LC 50, 96 hrs, Fish mg/l >1000

EC 50, 48 hrs, Daphnia, mg/l >1000

IC 50, 72 hrs, Algae, mg/l <100

DEGRADABILITY

The product is not readily biodegradable.

13 DISPOSAL CONSIDERATIONS

Belclene 400**WASTE MANAGEMENT**

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

DOT PROPER SHIPPING NAME	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Contains phosphinocarboxylic acid.)		
DOT PROPER SHIPPING NAME	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.(Contains phosphino carboxylic acid.)		
TDG SHIPPING NAME	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Contains phosphinocarboxylic acid.)		
IDENTIFICATION No.	3265	DOT HAZARD CLASS	8
DOT PACKING GROUP	III	U.S DOT HAZARD LABEL	Corrosive
UN NO. SEA	3265	IMDG CLASS	8
IMDG PACK GR.	III	MFAG	F-A, S-B
MARINE POLLUTANT	No.	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
Phosphinocarboxylic acid.	DSL	Yes.	EINECS	Yes.	Yes.	Yes.	Yes.	N/A.

US FEDERAL REGULATIONS

COMPONENT	SARA 302-TPC	CERCLA-RQ	SARA 313
Phosphinocarboxylic acid.			No.

US STATE REGULATIONS

COMPONENT	CAS	CA	FL	MA	MN	NJ	PA	RI
Phosphinocarboxylic acid.	110224-99-2	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.

Belclene 400

CONTROLLED PRODUCT CLASSIFICATION

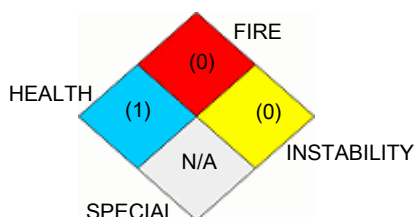
Canadian WHMIS Classification D2B E

16 OTHER INFORMATION

HAZARDOUS MATERIAL INFORMATION SYSTEM (HMIS)

HEALTH		1
FLAMMABILITY		0
PHYSICAL		0
PERSONAL PROTECTION		B

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)



GENERAL INFORMATION

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

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

Updated MSDS, no substantial changes.

ISSUED BY

J.B.

REVISION DATE 21-06-2010

VERSION No. 3

SAFETY DATA SHEET STATUS

Approved.

DATE 21-06-2010

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.