HCC: 740145-G30-120222



MATERIAL SAFETY DATA SHEET FLOCON 260

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

| PRODUCT NAME | FLOCON 260 |
|---------------------|--------------------------------------------------------------------------------|
| CHEMICAL NAME | Mixture of organic acids |
| PRODUCT NO. | 100512, 100517, 100518, 100519, 100520, 100521, 100522, 100523, 100524, 100950 |
| PRODUCT USE | Antiscalant |
| SUPPLIER | BWA Water Additives US LLC |
| | 1979 Lakeside Parkway |
| | Suite 925,Tucker. GA30084. |
| | T: (800) 600-4523 . |
| | (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

Corrosive to eyes

HEALTH WARNINGS

Corrosive to eyes

ROUTE OF ENTRY

Skin and/or eye contact.

TARGET ORGANS

Eyes Skin

3 COMPOSITION/INFORMATION ON INGREDIENTS

| Name | EC No. | CAS-No. | Weight |
|-----------------------------|--------|---------|--------|
| *PHOSPHONIC ACID DERIVATIVE | | | 5-10% |
| POLYCARBOXYLIC ACID | | | 10-30% |
| POLYCARBOXYLIC ACID | | | 30-60% |

COMPOSITION COMMENTS

Mixture of organic acids

* The specific identity of the component(s) of this product is withheld as a trade secret.

New Jersey Trade Secret Number: BL-5109-P.

HMIRC exemption registration number 7398. Granted 31 May 2011.

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. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs. Rinse mouth thoroughly. Get medical attention if any discomfort continues.

SKIN CONTACT

Immediately remove contaminated clothing. Rinse immediately with plenty of water. Continue to rinse for at least 15 minutes. Contact physician if irritation continues.

EYE CONTACT

Immediately rinse with water. Continue to rinse for 30 minutes. Get medical attention immediately

5 FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

Fire can be extinguished using: Dry chemicals, sand, dolomite etc. Carbon dioxide (CO2). 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

This material will not burn until the water has evaporated. Residue can burn.

SPECIFIC HAZARDS

Fire creates: Toxic gases/vapors/fumes of: Carbon monoxide (CO). Carbon dioxide (CO2). Oxides of: Nitrogen. Phosphorus. Sulfur. 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. Wear protective clothing as described in Section 8 of this material safety data sheet.

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.

STORAGE

Do NOT use container made of: Carbon steel. Store separated from: Alkalis. 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.

STORAGE CLASS

Corrosive storage.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

INGREDIENT COMMENTS

No exposure limits noted for ingredient(s).

PROCESS CONDITIONS

Provide eyewash station.

PROTECTIVE EQUIPMENT



ENGINEERING MEASURES

Provide adequate general and local exhaust ventilation.

RESPIRATORY EQUIPMENT

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

A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

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.

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.

SKIN PROTECTION

Wear apron or protective clothing in case of contact.

9 PHYSICAL AND CHEMICAL PROPERTIES

| APPEARANCE | Liquid |
|-----------------------|--------------------------|
| COLOR | Light (or pale). Yellow. |
| ODOR | Slight odor, acidic |
| SOLUBILITY | Miscible with water |
| BOILING POINT (°C) | 100 - 102 |
| MELTING POINT (°C) | <~-5 |
| RELATIVE DENSITY | 1.14 - 1.160 @ 20 °C |
| pH-VALUE, CONC. | <2 |
| SOLUTION | |
| VISCOSITY | 9 - 15 cSt @ 25 °C |
| PARTITION COEFFICIENT | <0 |
| (N-Octanol/Water) | |
| | |

10 STABILITY AND REACTIVITY

STABILITY

Stable under normal temperature conditions and recommended use.

CONDITIONS TO AVOID

Reacts with alkalis and generates heat. Avoid excessive heat for prolonged periods of time.

MATERIALS TO AVOID

Strong alkalis.

HAZARDOUS DECOMPOSITION PRODUCTS

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

11 TOXICOLOGICAL INFORMATION

TOXIC DOSE 1 - LD 50 2400 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

Non Irritant

Not a skin sensitizer.

EYE CONTACT

Corrosive to eyes **HEALTH WARNINGS**

Corrosive to eyes

12 ECOLOGICAL INFORMATION

LC 50, 96 Hrs, FISH mg/l Acute toxicity. LC50 96 hours fish > 1000 mg/l Juvenile Turbot OECD 203 EC 50, 48 Hrs, DAPHNIA, >1000 mg/l >100 IC 50, 72 Hrs, ALGAE, mg/l

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.

14 TRANSPORT INFORMATION



TDG SHIPPING NAME

ENVIRONMENTALLY HAZARDOUS SUBSTANCE/MARINE POLLUTANT **IDENTIFICATION No.** NA NO. DOT HAZARD CLASS DOT PACKING GROUP U.S DOT HAZARD LABEL UN NO. SEA

CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Contains polycarboxylic acids and a phosphonic acid.) No.

3265 UN 3265 8 Ш Corrosive 3265

| IMDG CLASS | 8 |
|-------------------|-----------|
| IMDG PACK GR. | III |
| EMS | F-A, S-B |
| MARINE POLLUTANT | No. |
| UN NO. AIR | 3265 |
| AIR CLASS | 8 |
| AIR PACK GR. | III |
| TDG CLASS | 8 |
| TDG LABEL(S) | CORROSIVE |
| TDG PACKING GROUP | III |
| | |

15 REGULATORY INFORMATION

INVENTORIES

| COMPONENT | CAN | US | EU | AUS | JAP | KOR | CHN | PHLP |
|-----------------------------|-----|------|--------|------|------|------|------|------|
| *PHOSPHONIC ACID DERIVATIVE | DSL | Yes. | EINECS | Yes. | Yes. | Yes. | Yes. | Yes. |
| POLYCARBOXYLIC ACID | DSL | Yes. | EINECS | Yes. | Yes. | Yes. | Yes. | Yes. |
| POLYCARBOXYLIC ACID | DSL | Yes. | EINECS | Yes. | Yes. | Yes. | Yes. | Yes. |

| COMPONENT | TSCA 12(b) Export Notification |
|-----------------------------|--------------------------------|
| *PHOSPHONIC ACID DERIVATIVE | No. |
| POLYCARBOXYLIC ACID | No. |

US FEDERAL REGULATIONS

| COMPONENT | SARA 302-TPC | CERCLA-RQ | SARA 313 |
|-----------------------------|--------------|-----------|----------|
| *PHOSPHONIC ACID DERIVATIVE | | | No. |
| POLYCARBOXYLIC ACID | No | No | No. |

US STATE REGULATIONS

| COMPONENT | CAS | CA | FL | MA | MN | NJ | PA | RI |
|-----------------------------|-----|----|------|------|------|------|------|------|
| *PHOSPHONIC ACID DERIVATIVE | | С | Yes. | Yes. | Yes. | Yes. | Yes. | Yes. |
| POLYCARBOXYLIC ACID | | No | No | No | No | No | No | No |
| POLYCARBOXYLIC ACID | | 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



CONTROLLED PRODUCT CLASSIFICATION

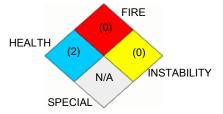
Canadian WHMIS Classification E

16 OTHER INFORMATION

HAZARDOUS MATERIAL INFORMATION SYSTEM (HMIS)

| HEALTH | 2 |
|---------------------|---|
| FLAMMABILITY | 0 |
| PHYSICAL | 0 |
| PERSONAL PROTECTION | D |

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)



GENERAL INFORMATION

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

Flocon 260 is certified by NSF International for use as an antiscalant in reverse osmosis plants. The maximum approved dose level is 5 mg/l in the feedwater.

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 COMMENTSRevised classificationISSUED BYR.D.B.REVISION DATEFeb 22, 2012VERSION No.7SDS NO.10927

MATERIAL SAFETY DATA SHEET STATUS Approved.

DISCLAIMER

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.