FLOCON® 260 (AS-260) Material Safety Data Sheet

Revision Date: 08/15/2008

Date Approved : 08/15/2008

1. Chemical Product and Company Identification

Product Name:	FLOCON® 260
Chemical Name:	Mixture of organic acids
General Use:	Reverse osmosis dispersant/ antiscalant
Emergency Telephone Numbers:	For Chemical Emergency, Spill Leak Fire Exposure or Accident - Call CHEMTREC Day or Night DOMESTIC NORTH AMERICA 800-424-9300 INTERNATIONAL, CALL 703-527-3887 (collect calls accepted)
Identification No.	3265

2. Composition/ Information on Ingredients

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

COMMENTS:

Mixture of organic acids The specific chemical identity will be made available to health professionals in accordance with 29 CFR 1910.1200 (1) (2) (3) (4).This Material Safety Data Sheet provides information for employee training and hazard identification. New Jersey Trade Secret Number:BL-5109-P. HMIRC EXEMPTION REGISTRATION NUMBER 7398.FILED 13th August 2008.

3. 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 Sensitiser
EYE CONTACT:	Irritating to eyes.
HEALTH WARNINGS:	Irritating to eyes.
ROUTE OF ENTRY:	Skin and/or eye contact.
TARGET ORGANS:	Eyes. Skin.

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.
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:	Important! Immediately rinse with water for at least 15 minutes. 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:	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. Sulphur. 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 safety data sheet. Wear protective clothing as described in Section 8 of this 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 labeled 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.
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
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
SOLUBILITY:	Miscible with water
BOILING POINT (°C):	100-102
RELATIVE DENSITY:	1.14 – 1.165 @ 20°C
pH-VALUE, CONC. SOLUTION:	<2
PARTITION COEFFICIENT: (N-Octanol/Water)	<0
MELTING POINT (°C):	<~-5
VAPOR PRESSURE:	17.5 mmHg @ 20°C
VISCOSITY:	9-15 cSt @ 25°C

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 alkalies.
HAZARDOUS DECOMPOSITION PRODUCTS:	Fire creates: Toxic gases/vapors/fumes of: Carbon monoxide (CO). Carbon dioxide (CO2). Oxides of: Nitrogen. Phosphorus. Sulphur.

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 Sensitiser
EYE CONTACT:	Irritating to eyes.
HEALTH WARNINGS:	Irritating to eyes.

12. Ecological Information

EC 50, 48 hrs, Daphnia, mg/l:	>1000
IC 50, 72 hrs, Algae, mg/l:	>100
DEGRADABILITY:	Not inherently 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, dispose in licensed hazardous waste.

14. Transport Information

DOT PROPER SHIPPING NAME:	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.(contains polycarboxylic acids and a phosphonic acid)

IDENTIFICATION NO.:	3265	**NA NO.:**	UN 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
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	**DOT PACKING GROUP:**	III

15. Regulatory Information

INVENTORIES

Component	CAN	US	EU	AUS	JAP	KOR	CHN	PHLP
PHOSPHONIC ACID DERIVATIVE	DSL	YES	EINECS					
POLYCARBOXYLIC ACID	DSL	YES	EINECS	N/A	N/A	N/A	N/A	N/A
POLYCARBOXYLIC ACID	DSL	YES	EINECS	N/A	N/A	N/A	N/A	N/A

Component	TSCA 12(b) Export Notification
PHOSPHONIC ACID DERIVATIVE	NO
POLYCARBOXYLIC ACID	N/A

US FEDERAL REGULATIONS

Component	SARA 302-TPQ	CERCLA-RQ	SARA 313
PHOSPHONIC ACID DERIVATIVE			No
POLYCARBOXYLIC ACID			No

CLEAN AIR ACT

Component	CAA Accidental Release Prevention
POLYCARBOXYLIC ACID	No

Component	CAS	CA	FL	MA	MN	NJ	PA	RI
PHOSPHONIC ACID DERIVATIVE		C	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.

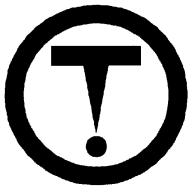
REGULATORY REFERENCES

29 CFR 1910.1010 Federal Regulations (OSHA Standard).

WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM – WHMIS

LABEL(S) FOR SUPPLY)

Corrosive Material



Materials Causing Other Toxic Effects

CONTROLLED PRODUCT CLASSIFICATION

Canadian WHMIS Classification D2B E

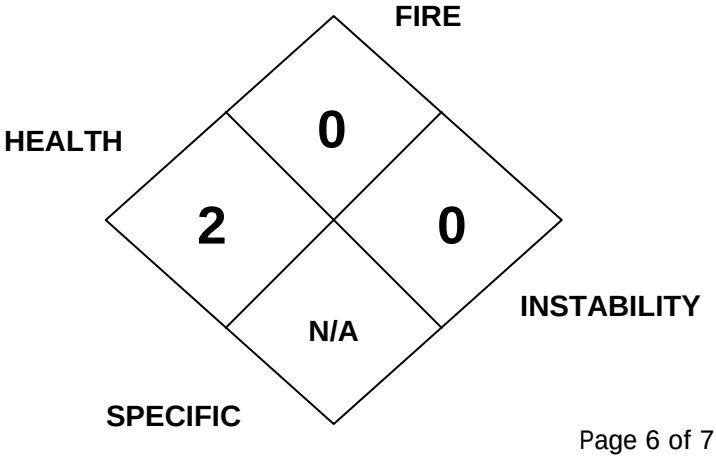
16. Other Information

HAZARDOUS MATERIAL INFORMATION SYSTEM (HMIS) Rating

HEALTH	2
FLAMMABILITY	0
REACTIVITY	0
PERSONAL PROTECTION	D

Key
4= Severe
3= Serious
2= Moderate
1= Slight
0= Minimal

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)



GENERAL INFORMATION

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

REVISION COMMENTS

Amended MSDS

ISSUED BY

G.B.

REVISION DATE 14th August 2008
VERSION No. 2
SAFETY DATA SHEET STATUS
Approved.
DATE 14th August 2008