



MATERIAL SAFETY DATA SHEET

FLOCON 190

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

PRODUCT NAME FLOCON 190
CHEMICAL NAME Sodium salt of nitrilotri(methylene) phosphonic acid
PRODUCT NO. 100507, 100508, 100509, 101272, 101286, 101287, 101288
PRODUCT USE Antiscalant
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

2 HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS

INHALATION

No specific health warnings noted. May cause irritation to the respiratory system.

INGESTION

No specific health warnings noted. May cause stomach pain or vomiting.

SKIN CONTACT

Non Irritant

Not a Skin Sensitiser

EYE CONTACT

Non irritant

HEALTH WARNINGS

No specific health warnings noted.

CARCINOGENICITY

This substance has no evidence of carcinogenic properties.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Weight
Sodium salt of nitrilotri(methylene) phosphonic acid	243-900-0	20592-85-2	30-60%

COMPOSITION COMMENTS

Contains 30-60% sodium salt of nitrilotri(methylene)phosphonic acid

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.

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INGESTION

DO NOT INDUCE VOMITING! Rinse mouth thoroughly. Never give liquid to an unconscious person. 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. Get medical attention promptly if symptoms occur after washing.

EYE CONTACT

Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyelids widely. If irritation persists: Seek medical attention and bring these instructions.

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

No unusual fire or explosion hazards noted.

PROTECTIVE MEASURES IN FIRE

Leave danger zone immediately. Self contained breathing apparatus and full protective clothing must be worn in case of fire.

FLASH POINT (°C) > 150 P/M Pensky-Martens.

6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS

Follow precautions for safe handling described in 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

Store in tightly closed original container in a dry, cool and well-ventilated place. Protect from freezing and direct sunlight. Store separated from: Cyanides. Reducing Agents. Avoid contact with strong oxidizers. Strong acids.

STORAGE CLASS

Unspecified storage.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

INGREDIENT COMMENTS

No exposure limits noted for ingredient(s).

PROTECTIVE EQUIPMENT



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ENGINEERING MEASURES

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.

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. 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.

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 splashes.

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Liquid
COLOR	Colourless to pale yellow.
ODOR	Characteristic.
SOLUBILITY	Miscible with water
BOILING POINT (°C)	> 100 @ 760 mm Hg
RELATIVE DENSITY	1.15 - 1.35 @ 20°C
pH-VALUE, DILUTED SOLUTION	<11 10-11 @ 1%
VISCOSITY	<10 cSt 25°C
FLASH POINT (°C)	> 150 P/M Pensky-Martens.

10 STABILITY AND REACTIVITY

STABILITY

Stable under normal temperature conditions and recommended use.

CONDITIONS TO AVOID

Avoid contact with acids. Avoid contact with strong oxidizers.

HAZARDOUS POLYMERISATION

Will not polymerise.

MATERIALS TO AVOID

Strong acids. Strong oxidizing substances.

HAZARDOUS DECOMPOSITION PRODUCTS

Toxic gases/vapors/fumes of: Nitrous gases (NOx). Phosphine (PH₃). Carbon monoxide (CO). Carbon dioxide (CO₂).

11 TOXICOLOGICAL INFORMATION

TOXIC DOSE 1 - LD 50 > 1000 mg/kg (oral rat)

INHALATION

No specific health warnings noted. May cause irritation to the respiratory system.

INGESTION

No specific health warnings noted. May cause stomach pain or vomiting.

SKIN CONTACT

Non Irritant Not a Skin Sensitiser

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EYE CONTACT

Non irritant

HEALTH WARNINGS

No specific health warnings noted.

OTHER HEALTH EFFECTS

This substance has no evidence of carcinogenic properties.

12 ECOLOGICAL INFORMATION

ECOTOXICITY

The product is not expected to be hazardous to the environment.

LC 50, 96 Hrs, FISH mg/l > 300

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

There are no data on the degradability of this product.

13 DISPOSAL CONSIDERATIONS

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.

Absorb in vermiculite or dry sand and dispose of at a licenced hazardous waste collection point.

14 TRANSPORT INFORMATION

TRANSPORT NOTES

Not regulated.

No transport warning sign required.

RAIL TRANSPORT NOTES

Not Classified

SEA TRANSPORT NOTES

Not Classified

AIR TRANSPORT NOTES

Not Classified

ENVIRONMENTALLY HAZARDOUS

No.

SUBSTANCE/MARINE POLLUTANT

DOT HAZARD CLASS

Not regulated.

U.S DOT HAZARD LABEL

No DOT label requirement
noted

MARINE POLLUTANT

No.

15 REGULATORY INFORMATION

INVENTORIES

COMPONENT	CAN	US	EU	AUS	JAP	KOR	CHN	PHLP
Sodium salt of nitrilotri(methylene) phosphonic acid	DSL	Yes.	EINECS	Yes.	Yes.	Yes.	Yes.	Yes.

US STATE REGULATIONS

COMPONENT	CAS	CA	FL	MA	MN	NJ	PA	RI
Sodium salt of nitrilotri(methylene) phosphonic acid	20592-85-2	No	No	No	No	No	No	No

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SARA (311/312) HAZARD CATEGORIES

None.

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.

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.

REGULATORY REFERENCES

29 CFR 1910.1010 Federal Regulations (OSHA Standard).

WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM -WHMIS

LABEL(S) FOR SUPPLY

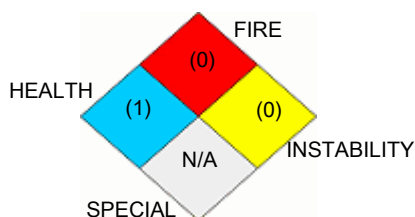
Not Classified According to
WHMIS.

16 OTHER INFORMATION

HAZARDOUS MATERIAL INFORMATION SYSTEM (HMIS)

HEALTH		1
FLAMMABILITY		0
PHYSICAL		0
PERSONAL PROTECTION		B

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)



GENERAL INFORMATION

Flocon 190 is certified by NSF International for use as an antiscalant in reverse osmosis plants. The maximum approved dose level is 10 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 COMMENTS

Updated MSDS, no substantial changes.

ISSUED BY

S.G.

REVISION DATE Aug 09, 2012

VERSION No. 2

SDS NO. 10689

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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.