



## SAFETY DATA SHEET

### PERMATREAT® PC-191T

#### Section: 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : PERMATREAT® PC-191T

Other means of identification : Not applicable.

Recommended use : REVERSE OSMOSIS ANTISCALANT

Restrictions on use : Refer to available product literature or ask your local Sales Representative for restrictions on use and dose limits.

Company : Nalco Company  
1601 W. Diehl Road  
Naperville, Illinois 60563-1198  
USA  
TEL: (630)305-1000

Emergency telephone number : (800) 424-9300 (24 Hours) CHEMTREC

Issuing date : 05/14/2014

#### Section: 2. HAZARDS IDENTIFICATION

##### GHS Classification

Not a hazardous substance or mixture.

##### GHS Label element

Precautionary Statements : **Prevention:**  
Wash hands thoroughly after handling.  
**Response:**  
Specific measures: consult MSDS Section 4.  
**Storage:**  
Store in accordance with local regulations.

Other hazards : None known.

#### Section: 3. COMPOSITION/INFORMATION ON INGREDIENTS

No hazardous ingredients

#### Section: 4. FIRST AID MEASURES

In case of eye contact : Rinse with plenty of water. Get medical attention if symptoms occur.

In case of skin contact : Wash off with soap and plenty of water. Get medical attention if symptoms occur.

If swallowed : Rinse mouth. Get medical attention if symptoms occur.

If inhaled : Get medical attention if symptoms occur.

Protection of first-aiders : In event of emergency assess the danger before taking action. Do not put yourself at risk of injury. If in doubt, contact emergency responders. Use personal protective equipment as required.

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Notes to physician : No specific measures identified.

**See toxicological information (Section 11)**

### Section: 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Unsuitable extinguishing media : None known.
- Specific hazards during firefighting : Not flammable or combustible.
- Hazardous combustion products : Carbon oxides nitrogen oxides (NOx) Oxides of phosphorus
- Special protective equipment for firefighters : Use personal protective equipment.
- Specific extinguishing methods : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

### Section: 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Refer to protective measures listed in sections 7 and 8.
- Environmental precautions : No special environmental precautions required.
- Methods and materials for containment and cleaning up : Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Flush away traces with water. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.

### Section: 7. HANDLING AND STORAGE

- Advice on safe handling : For personal protection see section 8. Wash hands after handling.
- Conditions for safe storage : Keep out of reach of children. Keep container tightly closed. Store in suitable labeled containers.
- Packaging material : Suitable material: Keep in properly labelled containers.  
Unsuitable material: not determined

### Section: 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Components with workplace control parameters

Contains no substances with occupational exposure limit values.

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Engineering measures : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

#### Personal protective equipment

Eye protection : Safety glasses

Hand protection : Wear protective gloves.  
Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Skin protection : Wear suitable protective clothing.

Respiratory protection : No personal respiratory protective equipment normally required.

Hygiene measures : Wash hands before breaks and immediately after handling the product.

#### Section: 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Liquid

Colour : Clear  
Amber  
-  
Green

Odour : Ammoniacal

Flash point : > 93.3 °C

pH : 10.0 - 11.5, 1 %  
(25 °C)

Odour Threshold : no data available

Melting point/freezing point : no data available

Initial boiling point and boiling range : no data available

Evaporation rate : no data available

Flammability (solid, gas) : no data available

Upper explosion limit : no data available

Lower explosion limit : no data available

Vapour pressure : no data available

Relative vapour density : no data available

Relative density : 1.335 - 1.362 (15.6 °C)

Density : no data available

Water solubility : completely soluble

Solubility in other solvents : no data available

Partition coefficient: n-  
octanol/water : Pow: 3.5  
log Pow: 0.544

Auto-ignition temperature : no data available

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Thermal decomposition	:	Carbon oxides nitrogen oxides (NOx) Oxides of phosphorus
Viscosity, dynamic	:	no data available
Viscosity, kinematic	:	no data available
VOC	:	0 %

#### Section: 10. STABILITY AND REACTIVITY

Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	No dangerous reaction known under conditions of normal use.
Conditions to avoid	:	Freezing temperatures.
Incompatible materials	:	Strong oxidizing agents Strong acids
Hazardous decomposition products	:	Oxides of carbon Oxides of nitrogen

#### Section: 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation, Eye contact, Skin contact

##### Potential Health Effects

Eyes	:	Health injuries are not known or expected under normal use.
Skin	:	Health injuries are not known or expected under normal use.
Ingestion	:	Health injuries are not known or expected under normal use.
Inhalation	:	Health injuries are not known or expected under normal use.
Chronic Exposure	:	Health injuries are not known or expected under normal use.

##### Experience with human exposure

Eye contact	:	No symptoms known or expected.
Skin contact	:	No symptoms known or expected.
Ingestion	:	No symptoms known or expected.
Inhalation	:	No symptoms known or expected.

##### Toxicity

##### Product

Acute oral toxicity	:	LD50 rat: > 17,800 mg/kg Test substance: Similar Product
Acute inhalation toxicity	:	no data available
Acute dermal toxicity	:	LD50 rabbit: > 15,800 mg/kg

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Test substance: Similar Product

Skin corrosion/irritation	:	Species: Rabbit Exposure time: 24 hrs Result: 0.3 Method: Draize Test Test substance: Similar Product
Serious eye damage/eye irritation	:	Species: rabbit Exposure time: 24 hrs Result: 3.7 Method: Draize Test Test substance: Similar Product
Respiratory or skin sensitization	:	no data available
Carcinogenicity	:	no data available
Reproductive effects	:	no data available
Germ cell mutagenicity	:	no data available
Teratogenicity	:	no data available
STOT - single exposure	:	no data available
STOT - repeated exposure	:	no data available
Aspiration toxicity	:	no data available

### Section: 12. ECOLOGICAL INFORMATION

#### Ecotoxicity

Environmental Effects : This product has no known ecotoxicological effects.

#### Product

Toxicity to fish : LC50 Rainbow Trout: > 330 mg/l  
Exposure time: 96 hrs  
Test substance: Similar Product

LC50 Sheepshead Minnow: 8,132 mg/l  
Exposure time: 96 hrs  
Test substance: Similar Product

LC50 Bluegill Sunfish: > 330 mg/l  
Exposure time: 96 hrs  
Test substance: Similar Product

LC50 Channel Catfish: 1,212 mg/l  
Exposure time: 96 hrs  
Test substance: Similar Product

LC50 Rainbow Trout: 4,530 mg/l  
Exposure time: 96 hrs

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Test substance: Product

LC50 Inland Silverside: > 10,000 mg/l

Exposure time: 96 h

Test substance: Product

Toxicity to daphnia and other aquatic invertebrates : LC50 Grass Shrimp: 4,575 mg/l  
Exposure time: 96 hrs  
Test substance: Similar Product

LC50 Daphnia magna: 1,673 mg/l

Exposure time: 48 hrs

Test substance: Product

EC50 Daphnia magna: 297 mg/l

Exposure time: 48 hrs

Test substance: Similar Product

LC50 Mysid Shrimp (*Mysidopsis bahia*): 8,263 mg/l

Exposure time: 96 h

Test substance: Product

Toxicity to algae : LC50 Green Algae (*Pseudokirchneriella subcapitata*, previously *Selenastrum capricornutum*): 20 mg/l  
Exposure time: 96 hrs  
Test substance: Similar Product

Toxicity to fish (Chronic toxicity) : LOEC: 47.6 mg/l  
Exposure time: 60 Days  
Species: Rainbow Trout  
Test substance: Similar Product

NOEC: 23 mg/l

Exposure time: 60 Days

Species: Rainbow Trout

Test substance: Similar Product

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : LOEC: 50 mg/l  
Exposure time: 28 Days  
Species: Daphnia magna  
Test substance: Similar Product

NOEC: 25 mg/l

Exposure time: 28 Days

Species: Daphnia magna

Test substance: Similar Product

Toxicity to terrestrial organisms : LC50 Bobwhite Quail: > 2,510 mg/kg  
Exposure time: 14 Days  
Test substance: Similar Product

LC50 Mallard Duck: > 2,510 mg/kg

Exposure time: 14 Days

Test substance: Similar Product

### Persistence and degradability

The organic portion of this preparation is expected to be inherently biodegradable.

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Total Organic Carbon (TOC) : 65,000 mg/l

### Mobility

The environmental fate was estimated using a level III fugacity model embedded in the EPI (estimation program interface) Suite TM, provided by the US EPA. The model assumes a steady state condition between the total input and output. The level III model does not require equilibrium between the defined media. The information provided is intended to give the user a general estimate of the environmental fate of this product under the defined conditions of the models.

If released into the environment this material is expected to distribute to the air, water and soil/sediment in the approximate respective percentages;

Air	:	<5%
Water	:	30 - 50%
Soil	:	50 - 70%

The portion in water is expected to be soluble or dispersible.

### Bioaccumulative potential

This preparation or material is not expected to bioaccumulate.

### Other information

no data available

## Section: 13. DISPOSAL CONSIDERATIONS

If this product becomes a waste, it is not a hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA) 40 CFR 261, since it does not have the characteristics of Subpart C, nor is it listed under Subpart D.

Disposal methods : Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.

Disposal considerations : Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

## Section: 14. TRANSPORT INFORMATION

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

### Land transport (DOT)

Proper shipping name : PRODUCT IS NOT REGULATED DURING TRANSPORTATION

### Air transport (IATA)

Proper shipping name : PRODUCT IS NOT REGULATED DURING TRANSPORTATION

### Sea Transport (IMDG/IMO)

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Proper shipping name : PRODUCT IS NOT REGULATED DURING TRANSPORTATION

### Section: 15. REGULATORY INFORMATION

#### EPCRA - Emergency Planning and Community Right-to-Know Act

##### CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

##### SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

**SARA 311/312 Hazards** : No SARA Hazards

**SARA 302** : SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313** : SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

#### California Prop 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

#### INTERNATIONAL CHEMICAL CONTROL LAWS :

##### TOXIC SUBSTANCES CONTROL ACT (TSCA)

The substances in this preparation are included on or exempted from the TSCA 8(b) Inventory (40 CFR 710)

##### CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA)

The substance(s) in this preparation are included in or exempted from the Domestic Substance List (DSL).

##### AUSTRALIA

All substances in this product comply with the National Industrial Chemicals Notification & Assessment Scheme (NICNAS).

##### CHINA

All substances in this product comply with the Provisions on the Environmental Administration of New Chemical Substances and are listed on or exempt from the Inventory of Existing Chemical Substances China (IECSC).

##### EUROPE

The substance(s) in this preparation are included in or exempted from the EINECS or ELINCS inventories

##### JAPAN

All substances in this product comply with the Law Regulating the Manufacture and Importation Of Chemical Substances and are listed on the Existing and New Chemical Substances list (ENCS).

##### KOREA

All substances in this product comply with the Toxic Chemical Control Law (TCCL) and are listed on the Existing Chemicals List (ECL)

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### NEW ZEALAND

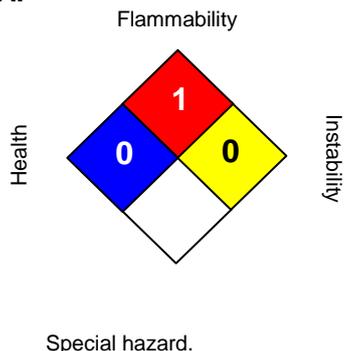
All substances in this product comply with the Hazardous Substances and New Organisms (HSNO) Act 1996, and are listed on or are exempt from the New Zealand Inventory of Chemicals.

### PHILIPPINES

All substances in this product comply with the Republic Act 6969 (RA 6969) and are listed on the Philippines Inventory of Chemicals & Chemical Substances (PICCS).

## Section: 16. OTHER INFORMATION

### NFPA:



### HMIS III:

<b>HEALTH</b>	<b>0</b>
<b>FLAMMABILITY</b>	<b>1</b>
<b>PHYSICAL HAZARD</b>	<b>0</b>

0 = not significant, 1 = Slight,  
2 = Moderate, 3 = High  
4 = Extreme, \* = Chronic

Revision Date : 05/14/2014  
Version Number : 1.0  
Prepared By : Regulatory Affairs

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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, unless specified in the text.

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