

# RO-Osmo Clean-10

Antiscalant/Antifoulant

Material Safety Data Sheet

## 1: Identification of Product and Company:

Product : RO-Osmo Clean-10 - Antiscalant/Antifoulant  
Use : Antiscalant / Antifoulant for Reverse Osmosis Membranes - Max Use:15 mg/L

## 2: Composition / Information on ingredients :

Aqueous solution containing:	CAS#	%(w/w)
Neutralized Acrylic Acid-2-Acrylamido-2-Methylpropane Sulfonic Acid Copolymer	40623-75-4	<40

## 3: Hazards Identification:

Symbol : No hazard label required.  
Risk phrases : -  
Health Hazards : This material is not expected to produce any significant adverse health effects when recommended use instructions are followed.  
Grossly contaminated clothing : Wash before re-use.

## 4: First-aid Measures:

Skin Contact : After contact with skin, wash immediately with plenty of water and seek medical advice.  
Eye Contact : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
Ingestion: : Rinse mouth. Give at least two glasses of water to drink (dilution). Do NOT induce vomiting and obtain medical advice.  
Inhalation: : Move person to fresh air. If breathing is difficult, seek medical attention.

## 5: Fire-fighting Measures:

Extinguishing Media : Water spray, foam, dry chemical, or carbon dioxide.  
Exposure hazards : None known.  
Combustion products : Nitrogen oxides, carbon monoxide, carbon dioxide, phosphines..  
Protective Equipment : Firefighters, and others exposed, wear self-contained breathing apparatus. Equipment should be thoroughly decontaminated after use.

## 6: Accidental Release Measures:

Protective equipment : Use personal protection recommended in section 8.  
Environmental Precautions : Keep out of drains and water courses.  
Methods For Cleaning Up : Contain large spills with dikes and transfer the material to appropriate containers for reclamation or disposal. Absorb remaining material or small spills with an inert material and then place in a chemical waste container. Flush spill area with water.

## 7: Handling and Storage:

Handling : Good industrial practice in housekeeping and personal hygiene should be followed  
Wash hands thoroughly after handling or contact.  
Storage : Protect from frost.

**8: Exposure controls/ Personal protection:**

Skin	: Wear suitable protective clothing. Wear rubber gloves.
Eyes	: Wear eye/face protection. Preferred type: Regular safety glasses.
Respiratory tract	: In case of insufficient ventilation, wear suitable respiratory equipment.
Occupational exposure limit	: No specific occupational exposure limit has been established.

**9: Physical and Chemical Properties (Typical specifications):**

Form	: Liquid
Appearance	: Clear Yellow
Odor	: Slight
Freezing/melting	: None
Specific gravity	: 1.0-1.3
Flash point	: None
pH	: <6.5
Solubility in water	: Complete

Note: These physical properties are typical values for this product and are subject to change.

**10: Stability and Reactivity:**

Hazardous Polymerization	: Hazardous polymerization does not occur
Conditions To Avoid	: None expected
Materials To Avoid	: Contact with strong oxidizing agents alkaline solution
Hazardous decomposition products	: Nitrogen oxides, phosphines, carbon monoxide, carbon dioxide

**11: Toxicological Information:**

This product has been tested for toxicity. The assessment below is based on data obtained on this product and on a related product of similar composition.

Oral	: LD50, rat, > 12000 mg/kg, not classified as harmful if swallowed.
Dermal	: LD50, rabbit, > 12000 mg/kg, not classified as harmful in contact with skin
Eye irritation	: rabbit, slightly irritating to eyes but not sufficient for classification. 24 h.
Skin irritation	: rabbit, not classified as irritating to skin. 24 h.
Mutagenicity	: No genetic effects were observed in standard tests with animal cells.

**12: Ecological Information:**

Environmental Toxicity	
Invertebrates	: 48 h EC50 Water flea (Daphnia magna) 800 mg/l.
Hazardous Class-Primary-Fish	: 96 h LC50 Rainbow trout (Oncorhynchus mycoses).
Algae	> 800 mg/l 96 h LC50 Bluegill sunfish (Lepomis macrochirus) > 800 mg/l 96 h EC50 Algae (Selenastrum capricornutum) > 42 0 mg/l
	Algal growth inhibition is due to ability of this product to complex materials Not to toxicity.

### 13: Disposal Considerations:

Waste disposal : Spills and excess chemicals should be treated as chemical waste and disposed of in accordance with all current special waste regulations. Do not empty into drains.

### 14: Transport Information:

UN-nr packing group : None  
Road/ Rail : Not regulated for transport  
Sea : Not regulated for transport  
Air : Not regulated for transport

### 15: Regulatory Information:

Labeling requirements : No hazard label required.  
Chemical description : Aqueous solution containing blend of organic.  
Risk phrases : None  
Air : None