# SAFETY DATA SHEET

## SECTION 1) CHEMICAL PRODUCT AND SUPPLIER'S IDENTIFICATION

<table>
<thead>
<tr>
<th>Product ID:</th>
<th>BIO MEMBRANE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Name:</td>
<td>BIO MEMBRANE</td>
</tr>
<tr>
<td>Revision Date:</td>
<td>Dec 28, 2015</td>
</tr>
<tr>
<td>Version:</td>
<td>1.0</td>
</tr>
<tr>
<td>Manufacturer’s Name:</td>
<td>Constant America Inc</td>
</tr>
<tr>
<td>Address:</td>
<td>7565 Cordner Lasalle, QC, CA, H8N 2R5</td>
</tr>
<tr>
<td>Emergency Phone:</td>
<td>(613) 996-6666</td>
</tr>
<tr>
<td>Information Phone Number:</td>
<td>514-761-3339 / 1-800-565-7888</td>
</tr>
<tr>
<td>Fax:</td>
<td></td>
</tr>
<tr>
<td>Product/Recommended Uses:</td>
<td>Liquid reverse osmosis filter cleaner</td>
</tr>
</tbody>
</table>

## SECTION 2) HAZARDS IDENTIFICATION

**Classification:**
- Skin Corrosion - Category 1A
- Serious Eye Damage - Category 1
- Carcinogenicity - Category 2
- Corrosive to metals - Category 1
- Acute toxicity Oral - Category 4

**Pictograms:**

- ![Safety Symbol](image)
- ![Corrosive Symbol](image)
- ![Carcinogenic Symbol](image)

**Signal Word:** Danger

**Hazardous Statements - Health:**
- Causes severe skin burns and eye damage
- Causes serious eye damage
- Suspected of causing cancer.
- Harmful if swallowed

**Hazardous Statements - Physical:**
- May be corrosive to metals

**Precautionary Statements - General:**
- If medical advice is needed, have product container or label at hand.
- Keep out of reach of children.
- Read label before use.

**Precautionary Statements - Prevention:**
- Do not breathe dust/fume/gas/mist/vapors/spray.
- Wash thoroughly/hands thoroughly after handling.
- Wear protective gloves/protective clothing/eye protection/face protection.
Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep only in original packaging. Do not eat, drink or smoke when using this product.

Precautionary Statements - Response:
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
Wash contaminated clothing before reuse.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Immediately call a POISON CENTER or doctor.
Specific treatment (see first-aid on this label).
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF exposed or concerned: Get medical advice/attention.
Absorb spillage to prevent material damage.
IF SWALLOWED: Call a POISON CENTER or doctor, if you feel unwell.
Rinse mouth.

Precautionary Statements - Storage:
Store locked up.
Store in a corrosive resistant container with a resistant inner liner.

Precautionary Statements - Disposal:
Dispose of contents/container in accordance with local/national/international regulation. Under RCRA it is the responsibility of the user of the products to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state and local laws.

Physical Hazards Not Otherwise Classified:
No data available.

Health Hazards Not Otherwise Classified:
No data available.

Acute toxicity of 12.48% of the mixture is unknown

SECTION 3) COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>CAS</th>
<th>Chemical Name</th>
<th>% By Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000064-02-3</td>
<td>EDTA TETRASODIUM SALT</td>
<td>10.1% - 23.5%</td>
</tr>
<tr>
<td>0001310-73-2</td>
<td>SODIUM HYDROXIDE</td>
<td>8.5% - 19.8%</td>
</tr>
<tr>
<td>000508-31-3</td>
<td>NITRILOTRIACETIC ACID, TRISODIUM SALT</td>
<td>0.0% - 0.8%</td>
</tr>
</tbody>
</table>

Specific chemical identity and/or exact percentage (concentration) of the composition has been withheld to protect confidentiality.

SECTION 4) FIRST-AID MEASURES

Inhalation:
Remove source of exposure or move person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. If breathing has stopped, trained personnel should begin rescue breathing or, if the heart has stopped, immediately start cardiopulmonary resuscitation (CPR) or automated external defibrillation (AED).

Eye Contact:
Remove source of exposure or move person to fresh air. Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing for a flushing duration of 30 minutes. Take care not to rinse contaminated water into the unaffected eye or onto the face. Immediately call a POISON CENTER/doctor.

Skin Contact:
Take off immediately all contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Rinse skin with lukewarm, gently flowing water/shower for a duration of 30 minutes or until medical aid is available. Immediately call a POISON CENTER/doctor. Wash contaminated clothing before re-use or discard.
Ingestion:
Rinse mouth with water. Do NOT induce vomiting. Give 1 to 2 cups of milk or water to drink. Never give anything by mouth to an unconscious person. If vomiting occurs naturally, lie on your side, in the recovery position. Immediately call a POISON CENTER/doctor.

Most Important Symptoms and Effects, Both acute and Delayed:
No data available.

Indication of Any Immediate Medical Attention and Special Treatment Needed:
No data available.

SECTION 5) FIRE-FIGHTING MEASURES

Suitable Extinguishing Media:
Dry chemical, foam, carbon dioxide, water spray or fog is recommended. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam. Sand or earth may be used for small fires only.

Unsuitable Extinguishing Media:
Do not use direct water stream since this may cause fire to spread.

Specific Hazards in Case of Fire:
No data available.

Fire-Fighting Procedures:
Isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done safely. Move undamaged containers from immediate hazard area if it can be done safely. Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Water may be ineffective but can be used to cool containers exposed to heat or flame. Caution should be exercised when using water or foam as frothing may occur, especially if sprayed into containers of hot, burning liquid. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

Special Protective Actions:
Wear protective pressure self-contained breathing apparatus (SCBA) and full turnout gear.

SECTION 6) ACCIDENTAL RELEASE MEASURES

Emergency Procedure:
Isolate hazard area and keep unnecessary people away. Remove all possible sources of ignition in the surrounding area. Notify authorities if any exposure to the general public or the environment occurs or is likely to occur.

Recommended Equipment:
Positive pressure, full-facepiece self-contained breathing apparatus (SCBA), or positive pressure supplied air respirator with escape SCBA (NIOSH approved).

Personal Precautions:
Avoid breathing vapor or mist. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing.

Environmental Precautions:
Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers.

Methods and Materials for Containment and Cleaning Up:
Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Contaminated absorbent material may pose the same hazard as the spilled product.

SECTION 7) HANDLING AND STORAGE

General:
Wash hands after use.
Do not get in eyes, on skin or on clothing.
Do not breathe vapors or mists.
Use good personal hygiene practices.
Eating, drinking and smoking in work areas is prohibited.
Remove contaminated clothing and protective equipment before entering eating areas.
Eyewash stations and showers should be available in areas where this material is used and stored.

Ventilation Requirements:
Use only with adequate ventilation to control air contaminants to their exposure limits. The use of local ventilation is recommended to control emissions near the source.
Storage Room Requirements:
Keep container(s) tightly closed and properly labeled. Store in cool, dry, well-ventilated areas away from heat, direct sunlight and strong oxidizers. Store in approved containers and protect against physical damage. Keep containers securely sealed when not in use. Indoor storage should meet OSHA standards and appropriate fire codes. Containers that have been opened must be carefully resealed to prevent leakage. Empty containers retain residue and may be dangerous.
Use non-sparking ventilation systems, approved explosion-proof equipment and intrinsically safe electrical systems in areas where this product is used and stored. Take precautionary measures against electrostatic discharge. To avoid fire or explosion, dissipate static electricity during transfer by ground and bonding containers and equipment before transferring material.

SECTION 8) EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection:
Wear eye protection with side shields or goggles. Wear indirect-vent, impact and splash resistant goggles when working with liquids. If additional protection is needed for entire face, use in combination with a face shield.

Skin Protection:
Use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced.
Use of apron and over-boots of chemically impervious materials such as neoprene or nitrile rubber is recommended to avoid skin sensitization. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Launder soiled clothes or properly dispose of contaminated material, which cannot be decontaminated.

Respiratory Protection:
If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker, a respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 and ANSI Z88.2 should be followed. Check with respiratory protective equipment suppliers.

Appropriate Engineering Controls:
Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAN Name</th>
<th>CAN ppm</th>
<th>CAN ppm</th>
<th>CAN ppm</th>
<th>CAN ppm</th>
<th>CAN ppm</th>
<th>CAN ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td>SODIUM HYDROXIDE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TWA (ppm)</th>
<th>ACGIH Carcinogen</th>
<th>ACGIH TLY Basis</th>
<th>ACGIH Notations</th>
</tr>
</thead>
<tbody>
<tr>
<td>SODIUM HYDROXIDE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Irr - Irritation, URT - Upper respiratory tract

SECTION 9) PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific Gravity</td>
<td>1.272±0.010</td>
</tr>
<tr>
<td>Appearance</td>
<td>Liquid clear to slightly cloudy pale yellowish</td>
</tr>
<tr>
<td>Odor Description</td>
<td>Mild ammonium</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>N/A</td>
</tr>
<tr>
<td>pH (1%)</td>
<td>12.32±0.50</td>
</tr>
<tr>
<td>Melting Point</td>
<td>N/A</td>
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<tr>
<td>Freezing Point</td>
<td>N/A</td>
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<tr>
<td>Low Boiling Point</td>
<td>N/A</td>
</tr>
<tr>
<td>High Boiling Point</td>
<td>N/A</td>
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</tbody>
</table>

BIO MEMBRANE
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<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash Point Symbol</td>
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</tr>
<tr>
<td>Flash Point</td>
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</tr>
<tr>
<td>Evaporation Rate</td>
<td>N/A</td>
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<tr>
<td>Flammability</td>
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<td>Lower Explosion Level</td>
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<td>Upper Explosion Level</td>
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<td>Vapor Pressure</td>
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<tr>
<td>Vapor Density</td>
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<tr>
<td>Water Solubility</td>
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<tr>
<td>Coefficient Water/Oil</td>
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<tr>
<td>Auto Ignition Temp</td>
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<tr>
<td>Decomposition Pt</td>
<td>N/A</td>
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<tr>
<td>Viscosity</td>
<td>N/A</td>
</tr>
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</table>

### SECTION 10) STABILITY AND REACTIVITY

**Reactivity:**

No data available.

**Stability:**

Stable under normal storage and handling conditions.

**Conditions to Avoid:**

Avoid heat, sparks, flame, high temperature and contact with incompatible materials.

**Hazardous Reactions/Polymerization:**

Hazardous polymerization will not occur.

**Incompatible Materials:**

Strong bases, acids, oxidizing and reducing agents, organic materials.

**Hazardous Decomposition Products:**

No data available.

### SECTION 11) TOXICOLOGICAL INFORMATION

**Likely Routes of Exposure:**

Inhalation, ingestion, skin absorption.

**Acute Toxicity:**

Harmful if swallowed

**Aspiration Hazard:**

No Data Available

**Carcinogenicity:**

Suspected of causing cancer.

**Germ Cell Mutagenicity:**

No Data Available

**Reproductive Toxicity:**

No Data Available

**Respiratory/Skin Sensitization:**

No Data Available

**Serious Eye Damage/Irritation:**

Causes serious eye damage

**Skin Corrosion/Irritation:**

Causes severe skin burns and eye damage

**Specific Target Organ Toxicity - Repeated Exposure:**
SECTION 12) ECOLOGICAL INFORMATION

Classification of the substance or mixture:
No data available.

Toxicity:
No data available.

Mobility in Soil:
No data available.

Bio-accumulative Potential:
No data available.

Persistence and Degradability:
No data available.

Other Adverse Effects:
No data available.

SECTION 13) DISPOSAL CONSIDERATIONS

Waste Disposal:
Under RCRA it is the responsibility of the user of the product to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state and local laws. Empty Containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes. Return drums to reclamation centers for proper cleaning and reuse.

SECTION 14) TRANSPORT INFORMATION

IMDG Information:
- UN number: UN3266
- Proper shipping name: Corrosive liquid, basic, inorganic, n.o.s. (SODIUM HYDROXIDE)
- Hazard class: 8
- Packaging group: III
- Marine Pollutant: No data available
- Note / Special Provision: No data available

IATA Information:
- UN number: UN3266
- Hazard class: 8
- Packaging group: III
- Proper shipping name: Corrosive liquid, basic, inorganic, n.o.s. (SODIUM HYDROXIDE)
- Note / Special Provision: No data available

U.S. DOT Information:
- UN number: UN3266
- Proper shipping name: Corrosive liquid, basic, inorganic, n.o.s. (SODIUM HYDROXIDE)
- Hazard class: 8
- Packaging group: III
- Hazardous substance (RQ): No data available
- Toxic-Inhalation Hazard: No data available
- Marine Pollutant: No data available
- Note / Special Provision: No data available

SECTION 15) REGULATORY INFORMATION
SECTION 16) OTHER INFORMATION

Glossary:

ACGIH- American Conference of Governmental Industrial Hygienists; ANSI- American National Standards Institute; Canadian Transportation of Dangerous Goods; CAS- Chemical Abstract Service; Chemtrec- Chemical Transportation Emergency Center(US); CHIP- Chemical Hazard Information and Packaging; DSL- Domestic Substances List; EC- Equivalent Concentration; EH40 (UK)- HSE Guidance Note EH40 Occupational Exposure Limits; EPCRA- Emergency Planning and Community Right-To-Know Act; ESL- Effects screening levels; HMIS- Hazardous Material Information Service; LC- Lethal Concentration; LD- Lethal Dose; NFPA- National Fire Protection Association; OEL- Occupational Exposure Limits; OSHA- Occupational Safety and Health Administration, US Department of Labor; PEL- Permissible Exposure Limit; SARA (Title III)- Superfund Amendments and Reauthorization Act; SARA 313- Superfund Amendments and Reauthorization Act, Section 313; SCBA- Self Contained Breathing Apparatus; STEL- Short Term Exposure Limit; TCEQ- Texas Commission on Environmental Quality; TLV- Threshold Limit Value; TSCA- Toxic Substances Control Act Public Law 94-469; TWA- Time Weighted Value; US DOT- US Department of Transportation; WHMIS- Workplace Hazardous Materials Information System.

Version 1.0:

Revision Date: Dec 28, 2015
First Edition.

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