

## SAFETY DATA SHEET

NNO3:PO4-X Nitrate & Phosphate reducer

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Version no.: 2

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### **Product identifier 1.1**

Product name: NO3:PO4-X Nitrate & Phosphate reducer -100,500,1000,5000 ml

Product code: R22200, R22203, R22204, R22206

#### **1.2 Relevant identified uses of the substance or mixture and uses advised against**

Aquarium water supplement.

#### **1.3 Details of the supplier of the safety data sheet**

Red Sea Fish Pharm Ltd

Free Trade Industrial Zone

Eilat 88000

Israel

Tel: +972-9-9567107

**E-mail address of person responsible for this SDS:** [sharonr@redseafish.com](mailto:sharonr@redseafish.com)

#### **1.4 Emergency telephone number**

**Emergency telephone number (with hours of operation):** N/A

### SECTION 2: Hazards identification

#### **2.1 Classification of the substance or mixture**

Classification according to 29 CFR 1910.1200 (OSHA HCS):

Flam. Liq. 3 H226

Classification in accordance to Regulation (EC) No. 1272/2008 (CLP):

Flam. Liq. 3 H226

See section 16 for the full text of the H-statements declared above.

#### **2.2 Label elements**

Labelling according to 29 CFR 1910.1200 (OSHA HCS)

Hazard pictogram(s):



Signal word: Warning

Hazard statement(s):

H226: Flammable liquid and vapour.

Precautionary Statement(s): Not required

P102: Keep out of reach of children.

P210: Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

P233: Keep container tightly closed.

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Labelling in accordance with Regulation 1272/2008 (CLP)

Hazard pictogram(s):



Signal word: Warning

Hazard statement(s):

H226: Flammable liquid and vapour.

Precautionary Statement(s): Not required

P102: Keep out of reach of children.

P210: Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

P233: Keep container tightly closed.

### 2.3 Other hazard

Not available

## **SECTION 3: Composition/information on ingredients**

### 3.2 Mixtures:

| Substance name | Identifiers                                 | %     | CLP Classification  | OSHA HCS Classification   |
|----------------|---|-------|---|---|
| Ethanol        | CAS number: 64-17-5<br>EC number: 200-578-6 | 24-26 | Flam. Liq. 2 H225   | Flam. Liq. 2 H225   |
| Acetic acid    | CAS number: 64-19-7<br>EC number: 200-580-7 | 3-5   | Flam. Liq. 3 H226<br>Skin Corr. 1A H314                                 | Flam. Liq. 3 H226<br>Skin Corr. 1A H314                                 |
| Methanol       | CAS number: 67-56-1<br>EC number: 200-659-6 | 2-<3  | Flam. Liq. 2 H225<br>Acute Tox. 3 H301,<br>H311, H331<br>STOT SE 1 H370 | Flam. Liq. 2 H225<br>Acute Tox. 3 H301,<br>H311, H331<br>STOT SE 1 H370 |

See section 16 for the full text of the H-statements declared above.

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.**

**Occupational exposure limits, if available, are listed in section 8.**

## **SECTION 4: First aid measures**

### 4.1 Description of first aid measures

**Eyes contact:** In case of contact with eyes, rinse immediately with plenty of water for at least 15 minutes. Get medical attention.

**Skin contact:** Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Get medical attention.

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**Inhalation:** Remove the victim from site of exposure to fresh air. If breathing is difficult, give oxygen. If not breathing give artificial respiration. Get medical attention.

**Ingestion:** **Do not induce vomiting.** If victim is conscious, wash mouth thoroughly with plenty of water. Never give anything by mouth to an unconscious person. Get medical attention.

### **4.2 Most important symptoms and effects, both acute and delayed**

See section 2.2 (Label elements) and/or section 11 (Toxicological information) for the most important known symptoms and effects.

### **4.3 Indication of any immediate medical attention and special treatment needed**

Not available

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## **SECTION 5: Fire-fighting measures**

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### **5.1 Extinguishing media**

Suitable: Use extinguishing media suitable to the surroundings such as, dry chemical powder, chemical foam, water spray and carbon dioxide.

Not suitable: N/A

### **5.2 Special hazards arising from the substance or mixture**

Flammable liquid and vapour. Flammable vapours may be produced if heated. When heated sufficiently, product may decompose to form smoke and toxic fumes, gases or vapours that may cause dizziness. Toxic fumes such as carbon oxides may be evolved on thermal decomposition.

### **5.3 Advice for firefighters**

**Special protective equipment for fire fighters:** Fire fighters should wear full protective clothing and self-contained breathing apparatus in positive pressure mode.

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## **SECTION 6: Accidental release measures**

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### **6.1 Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Ventilate area of spill.

### **6.2 Environmental precautions**

Prevent entry into waterways, sewers, basements or confined areas.

### **6.3 Methods and materials for containment and cleaning up**

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.

### **6.4 Reference to other sections**

See Section 1 for emergency contact information.

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## **SECTION 7: Handling and storage**

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### **7.1 Precautions for safe handling**

Avoid contact with skin and eyes. Avoid inhalation of vapors, mist or gas. Wash thoroughly after handling. Handle in accordance with good industrial hygiene and safety practice.



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Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also section 8 for additional information measures.

### **7.2 Conditions for safe storage, including any incompatibilities**

**Storage:** Keep only in original container. Avoid large temperature changes and store in a cool, dry, well ventilated environment away from direct sunlight. Keep containers closed when not in use. Keep away from oxidising compounds, reducing agents, alkali metals, ammonia, peroxides, acid chlorides, acid anhydrides.

**7.3 Specific end use(s):** N/A

## **SECTION 8: Exposure control/personal protection**

### **8.1 Control parameters**

| <b>Substance name</b> | <b>Occupational exposure limits</b>   |
|-----------------------|---|
| Ethanol               | ACGIH-TLV 1000 ppm (STEL)<br>OSHA-PEL 1000 ppm (TWA)<br>NIOSH-REL 1000 ppm (TWA), 10H   |
| Acetic acid           | ACGIH-TLV 10 ppm (TWA), 15 ppm (STEL)<br>OSHA-PEL 10 ppm (TWA)<br>NIOSH-REL 10 ppm (TWA), 15 ppm (STEL), 10H                  |
| Methanol              | ACGIH-TLV 200 ppm (TWA), 250 ppm (STEL), skin<br>OSHA-PEL 200 ppm (TWA)<br>NIOSH-REL 200 ppm (TWA), 250 ppm (STEL), skin, 10H |

### **8.2 Exposure controls**

#### Engineering measures

Use process enclosures, local exhaust ventilation, or others engineering controls to keep airborne levels below recommend exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

#### Person protective measures

Respiratory protection: Disposable particulate mask. Be sure to use an approved/certified equipment or equivalent equipment. Wear appropriate respirator when ventilation is inadequate.

Hand protection: Wear protective gloves to prevent skin exposure.

Eye protection: Wear protective safety glasses.

Skin protection: Wear appropriate long-sleeved clothing to minimize skin contact.

During normal non-professional use of the preparation no personal protective equipment is required. However, in case of manufacture or spillage, use as appropriate to the size of the spill.

Environmental exposure controls: Not available

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### **SECTION 9: Physical and chemical properties**

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#### **9.1 Information on basic physical and chemical properties**

Appearance: clear liquid  
Odour: alcoholic  
Odour threshold: N/A  
pH: N/A  
Melting point/Freezing point: N/A  
Initial boiling point/boiling range: N/A  
Flash point: 36°C-39°C (estimated)  
Evaporation rate: N/A  
Flammability: Vapour from liquid maybe combustible  
Upper/lower flammability or explosive limits: N/A  
Vapor pressure: N/A  
Vapor density: N/A  
Relative Density: N/A  
Solubility(ies): completely soluble in water  
Partition coefficient Octanol/Water: N/A  
Auto-ignition temperature: N/A  
Decomposition temperature: N/A  
Viscosity: N/A  
Explosive properties: N/A  
Oxidizing properties: N/A

#### **9.2 Other information**

Not available

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### **SECTION 10: Stability and reactivity**

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#### **10.1 Reactivity**

Not available.

#### **10.2 Chemical stability**

The product is stable under normal handling and storage conditions described in Section 7.

#### **10.3 Possibility of hazardous reactions**

Hazardous reactions are not expected, under normal conditions of storage and use.

#### **10.4 Conditions to avoid**

Long term exposure to heat, direct sunlight and sources of ignition.

#### **10.5 Incompatible materials**

Oxidising compounds, reducing agents, alkali metals, ammonia, peroxides, acid chlorides, acid anhydrides.

#### **10.6 Hazardous decomposition products**

Other decomposition products: not available  
In the event of fire: see section 5

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### SECTION 11: Toxicological information

#### 11.1 Information on toxicological effects

##### Acute toxicity:

| Product/substance name | Test                               | Species | Dose                        |
|------------------------|------------------------------------|---------|-----------------------------|
| Ethanol                | LD50, Oral                         | Rat     | 7060 mg/kg                  |
|                        | LC50, Inhalation                   | Rat     | 20000 ppm/10H               |
| Acetic acid            | LD50, Oral                         | Rat     | 3310 mg/kg                  |
|                        | LC50, Inhalation                   | Rat     | 11000 mg/m <sup>3</sup> /4H |
|                        | LD50, Administration onto the skin | Rabbit  | 1060 µL/kg                  |
| Methanol               | LD50, Oral                         | Rat     | 5600 mg/kg                  |
|                        | LC50, Inhalation                   | Rat     | 64000 ppm/4H                |
|                        | LD50, Administration onto the skin | Rabbit  | 15800 mg/kg                 |

Skin corrosion/irritation: Not available

Serious eye damage/irritation: Not available

Respiratory or skin sensitization: No compounds present in the preparation have been identified as having sensitizing properties.

Germ cell mutagenicity: No compounds present in the preparation have been identified as having mutagenic properties.

Carcinogenicity: No compounds present in the preparation have been identified as having carcinogenic properties.

Reproductive toxicity: No compounds present in the preparation have been identified as having reproductive toxicity properties.

Specific target organ toxicity (single exposure): Not available

Specific target organ toxicity (repeated exposure): Not available

Aspiration hazard: Not available

##### Other effect:

The preparation contains acetic acid and may cause local damage in contact with tissue of the eyes and skin. Inhalation of spray or mist may irritate the respiratory system and ingestion may damage the linings of the mouth, throat and gastro-intestinal tract.

The preparation contains methanol which may be fatal or cause blindness if swallowed and cannot be made non-poisonous. Effects due to ingestion may include; nausea, dizziness, gastrointestinal disturbance, weakness, confusion. Drowsiness or unconsciousness. Another volatile compound is present and could cause central nervous system depression, nausea, dizziness, narcosis and damage to the heart.

### SECTION 12: Ecological information

#### 12.1 Toxicity

Not available

#### 12.2 Persistence and Degradability

Compounds present in the preparation would be readily bio-degradable in the environment.

#### 12.3 Bioaccumulative potential

Not available

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### **12.4 Mobility in soil**

Though there is no specific information on the mobility of compounds in the preparation, they are soluble under normal environmental conditions in water so would also be expected to be highly mobile in soil.

### **12.5 Results of PBT and vPvB assessment**

Not available

### **Other adverse effects 12.6**

No components in NNO3:PO4-X Nitrate & Phosphate reducer have been shown to be hazardous to aquatic organisms

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## **SECTION 13: Disposal considerations**

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### **13.1 Waste treatment methods**

#### **Product**

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

#### **Packing**

Empty containers should be taken for local recycling, recovery or waste disposal.

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## **SECTION 14: Transport information**

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### **14.1 Un number**

ADR/RID: 1993

IMDG: 1993

IATA: 1993

DOT (US): 1993

### **14.2 UN proper shipping name**

ADR/RID: FLAMMABLE LIQUIDS, N.O.S. (Ethanol)

IMDG: FLAMMABLE LIQUIDS, N.O.S. (Ethanol)

IATA: Flammable liquids, n.o.s. (Ethanol)

DOT (US): Flammable liquids, n.o.s. (Ethanol)

### **14.3 Transport hazard class(es)**

ADR/RID: 3

IMDG: 3

IATA: 3

DOT (US): 3

### **14.4 Packing group**

ADR/RID: III

IMDG: III

IATA: III

DOT (US): III

### **14.5 Environmental hazard**

ADR/RID: -

IMDG: -

IATA: -

DOT (US): -

### **14.6 Special precautions for user**

Not available

### **14.7 Transport to bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not available

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## **SECTION 15: Regulatory information**

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This SDS complies with the following requirements of:  
EU Directives 67/548/EEC (DSD) and 1999/45/EC (DPD), including amendments  
EU Regulation (EC) No.1907/2006 (REACH) including amendments  
Regulation (EC) No.1272/2008 (CLP)  
29 CFR 1910.1200 (OSHA HCS)



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### **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

#### California Prop. 65 Components

This product contains a chemical known to State of California to cause birth defects, or other reproductive harm: Methanol Cas 67-56-1.

#### TSCA inventory

The components of the product are included or exempted from the TSCA inventory.

### **15.2 Chemical safety assessment**

Not available

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## **SECTION 16: Other information**

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### **NFPA Rating**

Health hazard: 1

Fire Hazard: 2

Reactivity Hazard: 0

### **Full text of Hazards Statements referred to in sections 2 and 3:**

Flam. Liq. - Flammable liquid

Acute Tox. - Acute toxicity

Skin Corr. - Skin corrosion

STOT SE - Specific target organ toxicity — single exposure

H225: Highly flammable liquid and vapour.

H226: Flammable liquid and vapour.

H301: Toxic if swallowed.

H311: Toxic in contact with skin.

H314: Causes severe skin burns and eye damage.

H331: Toxic if inhaled.

H370: Causes damage to organs.

Training advice: Before using/handling the product one must read carefully present SDS.

#### Key Legend Information:

CAS - Chemical Abstract Service

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

NTP - National Toxicology program

IARC - International Agency for Research on Cancer

N/A - Not available

R-phrases- Risk phrases

H-statements- Hazard statements

TLV - Threshold Limit Value





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TWA - Time-weighted average  
STEL - Short-Term Exposure Limit  
CSA - Chemical safety assessment

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