SAFETY DATA SHEET

Date of issue: 28/07/2016 Date of revision: 17/08/23 Version no.: 2

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

Product identifier 1.1

Product name: Nitrite/Nitrate Marine Test Kit
Product code: R21465

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

. Aquarium water quality test kit

Details of the supplier of the safety data sheet 1.3

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

Emergency telephone number 1.4

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):

Nitrite/Nitrate test kit

Reagent A	Reagent B	Reagent C
Met. Corr. 1 H290 Skin Corr. 1A H314	Skin Sens. 1 H317 Aquatic Chronic 2 H411	Not classified

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

Nitrite/ Nitrate test kit

Reagent A	Reagent B	Reagent C
Met. Corr. 1 H290 Skin Corr. 1A H314	Skin Sens. 1 H317 Aquatic Chronic 2 H411	Not classified

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)

Nitrite/ Nitrate test kit - Reagent A

Hazard pictogram(s):



Signal word: Danger

Hazard statement(s):
H290: May be corrosive to metals.
H314: Causes severe skin burns and eye damage.

Precautionary Statement(s):
P102: Keep out of reach of children.
P234: Keep only in original container.
P280: Wear protective gloves/ protective clothing/eye protection/face protection.
P301 + P330 + P331 + P310: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON Center or doctor/physician.
P303 + P361 + P353 + P310: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/ shower. Immediately call a POISON Center or doctor/physician.
P305 + P351 + P338 + P310: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON Center or doctor/physician.
P363: Wash contaminated clothing before reuse.

Nitrite/ Nitrate test kit - Reagent B

Hazard pictogram(s):



Signal word: Warning

Hazard statement(s):
H317: May cause an allergic skin reaction.
H411: Toxic to aquatic life with long lasting effects.

Precautionary Statement(s):
P102: Keep out of reach of children.
P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
P302 + P352: IF ON SKIN: Wash with plenty of soap and water.
P333 + P313: If skin irritation or rash occurs: Get medical advice/attention.
P280: Wear protective gloves / protective clothing/eye protection / face protection.
P273: Avoid release to the environment.

2.3 Label elements

Labelling according to 29 CFR 1910.1200 (OSHA HCS)

Nitrite/ Nitrate test kit - Reagent A

Hazard pictogram(s):



Signal word: Danger

Hazard statement(s):
H290: May be corrosive to metals.
H314: Causes severe skin burns and eye damage.

Precautionary Statement(s):
P102: Keep out of reach of children.
P234: Keep only in original container.
P280: Wear protective gloves/ protective clothing/eye protection/face protection.
P301 + P330 + P331 + P310: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON Center or doctor/physician.
P303 + P361 + P353 + P310: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/ shower. Immediately call a POISON Center or doctor/physician.
P305 + P351 + P338 + P310: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON Center or doctor/physician.
P363: Wash contaminated clothing before reuse.

Nitrite/ Nitrate test kit - Reagent B

Hazard pictogram(s):



Signal word: Warning

Hazard statement(s):
H317: May cause an allergic skin reaction.
H411: Toxic to aquatic life with long lasting effects.

Precautionary Statement(s):
P102: Keep out of reach of children.
P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
P302 + P352: IF ON SKIN: Wash with plenty of soap and water.
P333 + P313: If skin irritation or rash occurs: Get medical advice/attention.
P280: Wear protective gloves / protective clothing/eye protection / face protection.
P273: Avoid release to the environment.

Nitrite/ Nitrate test kit - Reagent C

Hazard pictogram(s): Not required
Signal word: Not required
Hazard statement(s): Not required
Precautionary Statement(s): Not required

Labelling in accordance with Regulation 1272/2008 (CLP)

Nitrite/ Nitrate test kit - Reagent A

Hazard pictogram(s):



Signal word: Danger

Hazard statement(s):
H290: May be corrosive to metals.
H314: Causes severe skin burns and eye damage.

Precautionary Statement(s):
P102: Keep out of reach of children.
P234: Keep only in original container.
P280: Wear protective gloves/ protective clothing/eye protection/face protection.
P301 + P330 + P331 + P310: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON Center or doctor/physician.
P303 + P361 + P353 + P310: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/ shower. Immediately call a POISON Center or doctor/physician.
P305 + P351 + P338 + P310: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON Center or doctor/physician.
P363: Wash contaminated clothing before reuse.

Nitrite/ Nitrate test kit - Reagent B

Hazard pictogram(s):



Signal word: Warning

Hazard statement(s):
H317: May cause an allergic skin reaction.
H411: Toxic to aquatic life with long lasting effects.

Precautionary Statement(s):
P102: Keep out of reach of children.
P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
P302 + P352: IF ON SKIN: Wash with plenty of soap and water.
P333 + P313: If skin irritation or rash occurs: Get medical advice/attention.
P280: Wear protective gloves / protective clothing/eye protection / face protection.

P273: Avoid release to the environment.

Nitrate pro test kit - Reagent C

Hazard pictogram(s): Not required
Signal word: Not required
Hazard statement(s): Not required
Precautionary Statement(s): Not required

2.4 Other hazard
Not available

SECTION 3: Composition/information on ingredients

3.2 Mixtures:

Nitrite/ Nitrate test kit - Reagent A

Substance name	Identifiers	%	CLP Classification	OSHA HCS Classification
Sulphuric acid	CAS number: 7664-93-9 EC number: 231-639-5	10-25	Skin Corr. 1A H314	Skin Corr. 1A H314

Nitrite/ Nitrate test kit - Reagent B

Substance name	Identifiers	%	CLP Classification	OSHA HCS Classification
Sulphanilic acid	CAS number: 121-57-3 EC number: 204-482-5	1-5	Skin Irrit. 2 H315 Skin Sens. 1 H317 Eye Irrit. 2 H319	Skin Irrit. 2 H315 Skin Sens. 1 H317 Eye Irrit. 2A H319 Aquatic Acute 3 H402
Zinc powder (<45µm)	CAS number: 7440-66-6 EC number: 231-175-3	5-10	Aquatic Acute 1 H400 Aquatic Chronic 1 H410	Aquatic Acute 1 H400 Aquatic Chronic 1 H410

Nitrite/ Nitrate test kit - Reagent C
No components need to be reported according to the applicable regulations.

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.

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

SECTION 5: Fire-fighting measures

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
The reagents tend to be water based and are not combustible or explosive. However, during heating may give off flammable fumes which if sufficient quantity is present may become flammable or explosive in a confined space. When heated sufficiently, product may decompose to form smoke and toxic fumes, gases or vapors that may cause dizziness.

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.

SECTION 6: Accidental release measures

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
For liquid: 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.
For solid: Pick up and place in a suitable container for reclamation or disposal, using a method that does not generate dust.

6.4 Reference to other sections
See Section 1 for emergency contact information.

SECTION 7: Handling and storage

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.

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 and away from direct sunlight. Keep containers closed when not in use. Keep away from acids, alkalis, oxidizing compounds and metals.

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

SECTION 8: Exposure control/personal protection

8.1 Control parameters

Substance name	Occupational exposure limits
Sulphuric acid	ACGIH-TLV 0.2 mg/m^3 (TWA), thoracic OSHA-PEL 1 mg/m^3 (TWA) NIOSH-REL 1 mg/m^3 (TWA)

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 chemical kit 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

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Nitrate pro test kit

	Reagent A	Reagent B	Reagent C
Appearance:	clear liquid	grey powder	white powder
Odour:	none	none	none
Odour threshold:	N/A	N/A	N/A
pH:	N/A	N/A	N/A
Melting point/Freezing point:	N/A	N/A	N/A
Initial boiling point/boiling range:	N/A	N/A	N/A
Flash point:	N/A	N/A	N/A
Evaporation rate:	N/A	N/A	N/A
Flammability:	non-combustible	non-combustible	non-combustible
Upper/lower flammability or explosive limits:	N/A	N/A	N/A
Vapor pressure:	N/A	N/A	N/A
Vapor density:	N/A	N/A	N/A
Relative Density:	N/A	N/A	N/A
Solubility(ies):	completely soluble to give an acidic solution	completely soluble to give an neutral solution	completely soluble to give an acidic solution
Partition coefficient Octanol/Water:	N/A	N/A	N/A

Auto-ignition temperature:	N/A	N/A	N/A
Decomposition temperature:	N/A	N/A	N/A
Viscosity:	N/A	N/A	N/A
Explosive properties:	N/A	N/A	N/A
Oxidizing properties:	N/A	N/A	N/A

9.2 Other information
Not available

SECTION 10: Stability and reactivity

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 and direct sunlight.

10.5 Incompatible materials
Acids, alkalis, oxidising compounds and metals. May produce heat.

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

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity:

Product/substance name	Test	Species	Dose
Sulphuric acid	LD50, Oral LC50, Inhalation	Rat Rat	2140 mg/kg 510 mg/m^3/2H
Sulphanilic acid	LD50, Oral	Rat	12300 mg/kg

Skin corrosion/irritation: Not available

Serious eye damage/irritation: Not available

Respiratory or skin sensitization: Not available

Germ cell mutagenicity: Not available

Carcinogenicity:

Sulphuric acid
ACGIH A2-Suspected human carcinogen
IARC Group 1 - Carcinogenic to humans
NTP 1 - Known to be human carcinogen

Reproductive toxicity: Not available

Specific target organ toxicity (single exposure): Not available

Specific target organ toxicity (repeated exposure): Not available

Aspiration hazard: Not available

Other effects:
Nitrite/ Nitrate test kit - Reagent A is classified as being corrosive due to the level of Sulphuric acid present and can cause local damage in contact with tissue of the eyes and skin. Inhalation of spray or mist will irritate the respiratory system and ingestion will damage the linings of the mouth, throat and gastro-intestinal tract.

SECTION 12: Ecological information

12.1 Toxicity

Product/substance name	Toxicity to fish
Sulphanilic acid	LC50/96h (Fathead Minnow) 100.4 mg/L

12.2 Persistence and Degradability
Compounds present in Nitrite/ Nitrate Reagent B are known to be persist in the environment.

12.3 Bioaccumulative potential
Zinc powder in Nitrite/ Nitrate test kit - Reagent B, can accumulate in plants and marine organisms.

12.4 Mobility in soil
The Zinc powder in Nitrite/ Nitrate test kit - Reagent B is not soluble under normal environmental conditions, however processing the product or extended exposure in aquatic environment may lead to zinc compounds in bioavailable forms. In soil, zinc is moderately mobile.

12.5 Results of PBT and vPvB assessment
Not available

12.6 Other adverse effects
Zinc powder in Nitrite/ Nitrate test kit - Reagent B, has been shown to be hazardous to aquatic organisms. Nitrite/ Nitrate test kit - Reagent A is strongly acidic so may be inadvertently hazardous to aquatic organisms.

SECTION 13: Disposal considerations

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.

SECTION 14: Transport information

14.1 Un number
ADR/RID: 3316 IMDG: 3316 IATA: 3316 DOT (US): 3316

14.2 UN proper shipping name
ADR/RID: CHEMICAL KIT

IMDG: CHEMICAL KIT

IATA: Chemical kit

DOT (US): Chemical kit

14.3 Transport hazard class(es)

ADR/RID: 9 IMDG: 9 IATA: 9 DOT (US): 9

14.4 Packing group

ADR/RID: II IMDG: - IATA: - DOT (US): -

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

SECTION 15: Regulatory information

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)

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

California Prop. 65 Components
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

TSCA inventory
The substances in this kit are included on or exempted from the TSCA inventory.

15.2 Chemical safety assessment

Not available

SECTION 16: Other information

NFPA Rating:

Nitrite/ Nitrate test kit

Reagent A	Reagent B	Reagent C
Health hazard: 3 Fire Hazard: 0 Reactivity Hazard: 0	Health hazard: 2 Fire Hazard: 0 Reactivity Hazard: 0	Health hazard: 0 Fire Hazard: 0 Reactivity Hazard: 0

Full text of Hazards Statements referred to in sections 2 and 3:
Expl. - Explosive
Acute Tox. - Acute toxicity
Skin Corr. - Skin corrosion
Skin Irrit. - Skin irritation
Skin Sens. - Skin sensitization
Eye Irrit.- Eye irritation
STOT SE - Specific target organ toxicity — single exposure
Aquatic Acute - Hazardous to the aquatic environment

Aquatic Chronic - Hazardous to the aquatic environment
H201: Explosive; mass explosion hazard.
H290: May be corrosive to metals.
H301: Toxic if swallowed.
H302: Harmful if swallowed.
H311: Toxic in contact with skin.
H331: Toxic if inhaled.
H314: Causes severe skin burns and eye damage.
H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H319: Causes serious eye irritation.
H335: May cause respiratory irritation.

H400: Very toxic to aquatic life.
H402: Harmful to aquatic life.
H410: Very toxic to aquatic life with long lasting effects.
H411: Toxic to aquatic life with long lasting effects.

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
TWA - Time-weighted average
STEL - Short-Term Exposure Limit
CSA - Chemical safety assessment
TSCA - United States Toxic Substances Control Act Inventory

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