

Iodine Pro Reef Test Kit and Refill

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

Product identifier 1.1

<u>Product name:</u> lodine Pro Reef test kit and refill; <u>Product code</u>: R21430; R21431

<u>1.2Relevant identified uses of the substance or mixture and uses advised against</u> Aquarium water quality test kit.

1.3Details 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

<u>1.4 Emergency telephone number</u> 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):

lodine pro test kit

Reagent A	Reagent B	Standard 0.06
Acute 2 H401	Met. Corr. 1 H290	Not classified
	Skin Corr. 1A H314	

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

lodine pro test kit

Reagent A	Reagent B	Standard 0.06
Not classified	Met. Corr. 1 H290	Not classified
	Skin Corr. 1A H314	

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



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2.2Label elements Labelling according to 29 CFR 1910.1200 (OSHA HCS)

Iodine pro test kit - Reagent A

Hazard pictogram(s): Not required

Signal word: Not required

Hazard statement(s): H401: Toxic to aquatic life.

<u>Precautionary Statement(s):</u> P273: Avoid release to the environment.

Iodine pro test kit - Reagent B

Hazard pictogram(s):



<u>Signal word:</u> Danger <u>Hazard statement(s):</u> 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.

Iodine pro test kit - Standard 0.06

<u>Hazard pictogram(s):</u> Not required <u>Signal word:</u> Not required <u>Hazard statement(s):</u> Not required <u>Precautionary Statement(s):</u> Not required



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Labelling in accordance with Regulation 1272/2008 (CLP)

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Iodine pro test kit - Reagent A

<u>Hazard pictogram(s):</u> Not required <u>Signal word:</u> Not required <u>Hazard statement(s):</u> Not required <u>Precautionary Statement(s):</u> Not required

lodine pro test kit - Reagent B

Hazard pictogram(s):



Signal word: Danger

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

<u>Precautionary Statement(s):</u>
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.

lodine pro test kit - Standard 0.06

<u>Hazard pictogram(s):</u> Not required <u>Signal word:</u> Not required <u>Hazard statement(s):</u> Not required <u>Precautionary</u> <u>Statement(s):</u> Not required

2.3 Other hazard Not available



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SECTION 3: Composition/information on

ingredients

lodine pro test kit - Reagent A

Substance name	Identifiers	%	CLP Classification	OSHA HCS Classification
Sodium nitrite	CAS number: 7632-00-0 EC number: 231-555-9	4	Ox. Sol. 3 H272 Acute Tox. 3 H301 Aquatic Acute 1 H400	Ox. Sol. 3 H272 Acute Tox. 3 H301 Aquatic Acute 1 H400

Iodine pro test kit - Reagent B

Substance name	Identifiers	%	CLP Classification	OSHA HCS Classification
Nitric acid (70%)	CAS number: 7697-37-2 EC number: 231-714-2	25-50	Ox. Sol. 3 H272 Skin Corr. 1A H314	Ox. Sol. 3 H272 Skin Corr. 1A H314
Ammonium iron bis(sulphate)	CAS number: 7783-83-7 EC number: N/A	5-10	Not available	Not available

lodine pro test kit - Standard 0.06

Substance name	Identifiers	%	CLP Classification	OSHA HCS Classification
Potassium iodate	CAS number: 7758-05-6 EC number: 231-831-9	5-10	Not available	Not available

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.

4.2Most 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.



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<u>4.3Indication of any immediate medical attention and special treatment needed</u> Not available

SECTION 5: Fire-fighting

measures 5.1 Extinguishing

<u>media</u>

<u>Suitable</u>: Use extinguishing media suitable to the surroundings such as, dry chemical powder, chemical foam, water spray and carbon dioxide. Not suitable: N/A

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 vapours that may cause dizziness.

5.3Advice 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.

6.3Methods and materials for containment and cleaning up

<u>For liquid:</u> 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.

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

6.4Reference 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.

7.2Conditions 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.



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7.3 Specific end use(s): N/A

SECTION 8: Exposure control/personal protection

8.1 Control parameters

Substance name	Occupational exposure limits	
Acetic acid	ACGIH-TLV 10 ppm (TWA), 15 ppm (STEL)	
	OSHA-PEL 10 ppm (TWA)	
	NIOSH-REL 10 ppm (TWA), 15 ppm (STEL), 10H	
Sodium hydroxide	ACGIH-TLV 2 mg/m ³ (CEIL)	
	OSHA-PEL 2 mg/m ³ (TWA)	
	NIOSH-REL 2 mg/m ³ (TWA), 15M	
Hydrochloric acid	ACGIH-TLV 2 ppm (CEIL)	
	OSHA-PEL 5 ppm (CEIL)	
	NIOSH-REL 5 ppm (CEIL)	
Ethylene glycol	ACGIH-TLV 100 mg/m ³ (CEIL), aerosol	
Nitric acid	ACGIH-TLV 2 ppm (TWA), 4 (STEL) OSHA-PEL 5 ppm (TWA)	
Ammonium iron bis(sulphate)	ACGIH-TLV 1 mg(Fe)/m3 (TWA)	



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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

<u>Respiratory protection:</u> Wear appropriate respirator when ventilation is inadequate. Be sure to use an approved/certified equipment or equivalent equipment.

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

lodine pro test kit

	Reagent A	Reagent B	Standard 0.06
Appearance:	clear liquid	clear liquid	white crystalline powder
Odour:	none	pungent	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 in water to give an alkaline solution	completely soluble in water to give an acidic solution	completely soluble in water to give an alkaline 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



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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.

10.5Incompatible materials

Acids, alkalis, oxidising compounds and metals. May produce heat.

10.6Hazardous 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
Hydroxylamine hydrochloride	LD50, Oral	Rat	141 mg/kg
Acetic acid	LD50, Oral	Rat	3310 mg/kg
	LD50, Administration onto the skin	Rabbit	1060 mg/kg
2,2'-Bipyridyl	LD50, Oral	Rat	100 mg/kg
Hydrochloric acid	LC50, Inhalation	Rat	3700 ppm/30M
Ethylene glycol	LD50, Oral	Rat	4700 mg/kg
	LD50, Administration onto the skin	Rabbit	9530 µL/kg
Sodium tetraphenylborate	LD50, Oral	Rat	288 mg/kg
Cetrimonium bromide	LD50, Oral	Rat	410 mg/kg
Sodium nitrite	LC50, Inhalation	Rat	5.5 mg/m ³ /4H
	LD50, Oral	Rat	157.9 mg/kg
Nitric acid	LC50, Inhalation	Rat	130 mg/m ³ /4H

Skin corrosion/irritation: Not available

Serious eye damage/irritation: Not available

Respiratory or skin sensitization: Not available



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<u>Germ cell mutagenicity</u>: No compounds present in the reagents have been identified as having mutagenic toxicity properties.

Carcinogenicity: Not available

<u>Reproductive toxicity</u>: No compounds present in the reagents 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 effects:

Due to the level of Nitric acid present, lodine pro test - Reagent B is classified as being corrosive and it extremely destructive to tissue of the mucus membranes and upper respiratory tract, eyes and skin. Iodine pro test - Reagent B and the Iodine Standard also contain compounds at low levels which are known to be irritating to eyes, respiratory system and skin.

SECTION 12: Ecological information

12.1 Toxicity

Not available

12.2 Persistence and Degradability

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

12.3Bioaccumulative potential

Not available

12.4 Mobility in soil

Though there is no specific information on the mobility of compounds in the reagents, 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

12.6 Other adverse effects

Sodium nitrite, in Iodine Pro test kit - Reagent A have been shown to be hazardous to aquatic organisms while a compound present at very low levels (<0.1%) in Iron test kit - Reagent B has been shown to be very toxic 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.



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SECTION 14: Transport	information		
<u>14.1Un number</u> <u>ADR/RID:</u> 3316	<u>IMDG: </u> 3316	<u>IATA: </u> 3316	<u>DOT (US): </u> 3316
14.2 UN proper shipping ADR/RID: CHEMICAL KI			
IMDG: CHEMICAL KIT			
IATA: Chemical kit			
DOT (US): Chemical kit			
14.3 Transport hazard c ADR/RID: 9	lass(es) IMDG: 9	<u>IATA</u> : 9	<u>DOT (US)</u> : 9
14.4 Packing group ADR/RID: II	IMDG: -	<u>IATA</u> : II	<u>DOT (US)</u> : -
14.5 Environmental haz ADR/RID: -	ard IMDG: -	<u>IATA</u> : -	<u>DOT (US)</u> : -
14.6 Special precaution Not available	s for user		
<u>14.7Transport to bulk a</u> Not available	ccording to Annex II o	f MARPOL 73/78 and the	IBC Code
SECTION 15: Regulator	ry information		

This SDS complies with the following requirements of: 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.

<u>TSCA inventory</u> The substances in this kit are included on or exempted from the TSCA inventory.

15.2 Chemical safety assessment

Not available



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SECTION 16: Other information

NFPA Rating:

lodine pro test kit		
Reagent A	Reagent B	Standard 0.06
Health hazard: 0	Health hazard: 3	Health hazard: 0
Fire Hazard: 0	Fire Hazard: 0	Fire Hazard: 0
Reactivity Hazard: 0	Reactivity Hazard: 0	Reactivity Hazard: 0

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

Met. Corr. - Substance or mixture corrosive to metals Flam. Liq. - Flammable liquid Ox. Sol. - Oxidising solid Acute Tox. - Acute toxicity Skin Corr. - Skin corrosion Skin Irrit. - Skin irritation Eye Dam. - Serious eye damage Skin Sens. - Skin sensitization Eye Irrit.- Eye irritation STOT SE - Specific target organ toxicity - single exposure Carc. - Carcinogenicity STOT RE - Specific target organ toxicity - repeated exposure Aquatic Acute - Hazardous to the aquatic environment H226: Flammable liquid and vapour. H272: May intensify fire; oxidizer. H290: May be corrosive to metals. H301: Toxic if swallowed. H302: Harmful if swallowed. H311: Toxic in contact with skin. H312: Harmful in contact with skin. H314: Causes severe skin burns and eye damage. H315: Causes skin irritation. H317: May cause an allergic skin reaction. H318: Causes serious eye damage. H319: Causes serious eye irritation. H335: May cause respiratory irritation. H351: Suspected of causing cancer. H373: May cause damage to organs through prolonged or repeated exposure. H400: Very toxic to aquatic life. H401: Toxic to aquatic life.

H410: Very toxic to aquatic life with long lasting effects.



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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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