Material Safety Data Sheet

PHENOANTHROLINE INDICATOR 1-10 (RXSOL-60-6175-100)

1. Product and Company Identifaction

Product Name	RXSOL-60-6175-100
Product Type	PHENOANTHROLINE INDICATOR 1-10

Company Details:

RX MARINE INTERNATIONAL
105, A wing , BSEL , TECH PARK.
VASHI ,NEW BOMBAY 400703 INDIA

Stock Point ::: Mumbai, Kolkata, Chennai, Visakhapatnam, Kandla, Fujairah

Phone	+91 22 27815540 / 41 / 42
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Email	mail@rxmarine.com

2. Composition / informationon ingredients

Mixture

Name	Product Identifier	w/w %	Classification (GHS-US)
1,2-Propylene glycol	(CAS No.) 57-55-6	35.4%	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2B, H320
Water	(CAS No.) 7732-18-5	33.12%	Not classified
2-Propanol, 1-propoxy-	(CAS No.) 1569-01-3	30.13%	Flam. Liq. 3, H226 Eye Irrit. 2A, H319 STOT SE 3, H336 STOT SE 3, H335
Phenolphthalein	(CAS No.) 77-09-8	1.35%	Acute Tox. 4 (Oral), H302 Muta. 2, H341 Carc. 1B, H350 Repr. 2, H361

Full text of H-phrases: see section 16

3. Hazards Identification

Classification Of The Substance Or Mixture
Classification (GHS-US)

Flam. Liq. 3 H226
Skin Irrit. 2 H315
Eye Irrit. 2A H319
Muta. 2 H341
Carc. 1B H350
Repr. 2 H361

Label Elements
GHS-US labeling
Hazard pictograms (GHS-US) :

GHS02 GHS07 GHS08

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) :

H226 - Flammable liquid and vapor

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H341 - Suspected of causing genetic defects

H350 - May cause cancer (oral)

H361 - Suspected of damaging fertility or the unborn child

Precautionary statements (GHS-US) :

P201 - Obtain special instructions before use

P202 - Do not handle until all safety precautions have been read and understood

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

P233 - Keep container tightly closed

P240 - Ground/bond container and receiving equipment

P241 - Use explosion-proof electrical/ventilating/lighting/equipment.

P242 - Use only non-sparking tools

P243 - Take precautionary measures against static discharge

P264 - Wash hands and forearms thoroughly after handling.

P280 - Wear eye protection, protective clothing, protective gloves.

P303+P361+P353+P352 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Wash with plenty of soap and water. Rinse skin with water/shower.

P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308+P313 - IF exposed or concerned: Get medical advice/attention

P321 - Specific treatment (see Section 4)

P332+P313 - If skin irritation occurs: Get medical advice/attention

P337+P313 - If eye irritation persists: Get medical advice/attention

P362 - Take off contaminated clothing

P370+P378 - In case of fire: Use media appropriate for extinction.

P403+P235 - Store in a well-ventilated place. Keep cool

P405 - Store locked up

P501 - Dispose of contents/container according to local, regional, national, territorial, provincial, and international regulations.

Other Hazards Not available

Unknown acute toxicity (GHS US) Not available

4. First Aid Measures

Description Of First Aid Measures

General: Never give anything by mouth to an unconscious person. If exposed or concerned: Get medical advice/attention.

Inhalation: When symptoms occur: go into open air and ventilate suspected area.

Skin Contact: Rinse with plenty of water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.

Eye Contact: Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.

Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

Most Important Symptoms And Effects Both Acute and Delayed

General: May cause cancer. Suspected of causing genetic defects. Suspected of damaging fertility or the unborn child.

Inhalation: May cause respiratory irritation.

Skin Contact: Causes skin irritation.

Eye Contact: Causes eye irritation.

Ingestion: Dizziness, headaches, nausea.

Chronic symptoms: Repeated or prolonged exposure may cause permanent damage to health.

Indication Of Any Immediate Medical Attention And Special Treatment Needed

If you feel unwell, seek medical advice (show the label where possible).

5. Fire-fighting Measures

Extinguishing Media

Suitable extinguishing media: Foam. Dry powder. Carbon dioxide. Water spray. Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media: Use of heavy stream of water may spread fire. Do not use a heavy water stream.

Special Hazards Arising From The Substance Or Mixture

Fire hazard: Flammable liquid and vapor.

Explosion hazard: Product is not explosive. May form flammable/explosive vapor-air mixture.

Reactivity: Hazardous reactions will not occur under normal conditions.

Advice For Firefighters

Precautionary measures fire: Not available

Firefighting instructions: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Do not allow run-off from fire fighting to enter drains or water courses.

Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Carbon oxides (CO, CO2).

Reference To Other Sections
Refer to section 9 for flammability properties.

6. Accidental Release Measures

Personal Precautions, Protective Equipment And Emergency Procedures

General measures: Do not handle until all safety precautions have been read and understood. Use special care to avoid static electric charges. Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

For Non-Emergency Personnel

Protective equipment: Use appropriate personal protection equipment (PPE).

Emergency procedures: Evacuate unnecessary personnel.

For Emergency Personnel

Protective equipment: Equip cleanup crew with proper protection.

Emergency procedures: Ventilate area.

Environmental Precautions

Prevent entry to sewers and public waters.

Methods And Material For Containment And Cleaning Up

For containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams

Methods for cleaning up: Absorb and/or contain spill with inert material, then place in suitable container. Clear up spills immediately and dispose of waste safely.

Reference To Other Sections

See Heading 8. exposure controls and personal protection

7. Handling and Storage

Precautions For Safe Handling

Additional hazards when processed: Handle empty containers with care because residual vapors are flammable.

Hygiene measures: Handle in accordance with good industrial hygiene and safety procedures,Wash hands and forearms thoroughly after handling.

Conditions For Safe Storage, Including Any Incompatibilities

Technical measures: Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment.

Storage conditions: Keep only in the original container in a cool, well ventilated place away from direct sunlight, extreme high and low temperatures. Keep container closed when not in use. Store locked up.

Incompatible materials: Heat sources.

Storage area: Store locked up. Store in a well-ventilated place. Keep cool.

Specific End Use(s)

Laboratory Reagent

8. Exposure controls and personal protection

Control Parameters

1,2-Propylene glycol (57-55-6)

Ontario	OEL TWA (mg/m^3)	155 mg/m^3
Ontario	OEL TWA (ppm)	50 ppm

Exposure Controls

Appropriate engineering controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor or mists below the applicable workplace exposure limits indicated below. All electrical equipment should comply with the National Electric Code. Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof equipment. Take precautionary measures against static discharges. Ensure all national/local regulations are observed. Gas detectors should be used when flammable gases/vapours may be released.

Personal protective equipment: Avoid all unnecessary exposure. Fireproof clothing. Gloves. Protective goggles.

Materials for protective clothing: Chemically resistant materials and fabrics.

Hand protection: Wear chemically resistant protective gloves.

Eye protection: Chemical goggles or safety glasses.

Skin and body protection: Wear suitable protective clothing.

Respiratory protection: Use a NIOSH-approved respirator or self-contained breathing apparatus whenever exposure may exceed established Occupational Exposure Limits.

Thermal hazard protection: Wear suitable protective clothing.

Environmental exposure controls: Not available

Other information: When using, do not eat, drink or smoke.

9. Physical and chemical properties

Information On Basic Physical And Chemical Properties

Physical state	Liquid
Appearance	Clear
Odor	Not available
Odor threshold	Not available
pH	Not available
Relative evaporation rate (butyl acetate=1)	Not available
Melting point	Not available
Freezing point	Not available
Boiling point	Not available
Flash point	Not available
Auto-ignition temperature	Not available
Decomposition Temperature	Not available
Flammability (solid, gas)	Not available
Lower flammable limit	Not available
Upper flammable limit	Not available
Vapour pressure	Not available
Relative vapor density at 20 °C	Not available
Relative density	Not available
Specific gravity density	Not available
Solubility	Not available
Log Pow	Not available
Log Kow	Not available
Viscosity, kinematic	Not available
Viscosity, dynamic	Not available
Explosion data - sensitivity to mechanical impact	Not available

Explosion data - sensitivity to static discharge	Not available

10. Stability and reactivity

Reactivity Hazardous reactions will not occur under normal conditions.

Chemical Stability Stable under normal temperature and pressure. Flammable liquid and vapor. May form flammable/explosive vapor-air mixture.

Possibility Of Hazardous Reactions Hazardous polymerization will not occur.

Conditions To Avoid Direct sunlight. Extremely high or low temperatures. Open flame. Overheating. Heat. Sparks.

Incompatible Materials Strong acids. Strong bases.

Hazardous Decomposition Products Carbon oxides (CO, CO2). May release flammable gases.

11. Toxicological information

Information On Toxicological Effects - Product

Acute toxicity : Not classified

LD50 and LC50 Data Not available

Skin corrosion/irritation: Causes skin irritation.

Serious eye damage/irritation: Causes serious eye irritation.

Respiratory or skin sensitization: Not classified

Germ cell mutagenicity: Suspected of causing genetic defects.

Teratogenicity: Not available

Carcinogenicity: May cause cancer (ingestion).

Specific target organ toxicity (repeated exposure): Not classified

Reproductive toxicity: Suspected of damaging fertility or the unborn child.

Specific target organ toxicity (single exposure): Not classified

Aspiration hazard: Not classified

Symptoms/injuries after inhalation: May cause respiratory irritation.

Symptoms/injuries after skin contact: Causes skin irritation.

Symptoms/injuries after eye contact: Causes eye irritation.

Symptoms/injuries after ingestion: Dizziness, headaches, nausea.

Chronic symptoms: Repeated or prolonged exposure may cause permanent damage to health.

Information On Toxicological Effects - Ingredient(s)

LD50 and LC50 Data

1,2-Propylene glycol (57-55-6)	
LD50 oral rat	20000 mg/kg
LD50 dermal rabbit	20800 mg/kg

2-Propanol, 1-propoxy- (1569-01-3)

LD50 oral rat	2504 mg/kg
LD50 dermal rabbit	3550 mg/kg

Phenolphthalein (77-09-8)

LD50 oral rat	1000 mg/kg

Phenolphthalein (77-09-8)

IARC group	2B
National Toxicity Program (NTP) Status	1, 3

12. Ecological information

Toxicity

1,2-Propylene glycol (57-55-6)

LC50 fish 1	51600 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
EC50 Daphnia 1	> 10000 mg/l (Exposure time: 24 h - Species: Daphnia magna)
EC50 other aquatic organisms 1	19000 mg/l (Exposure time: 96 h - Species: Pseudokirchneriella subcapitata)
LC50 fish 2	41 (41 - 47) ml/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
EC50 Daphnia 2	> 1000 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])

Persistence And Degradability

Phenolpthalein Indicator Solution

Persistence and degradability	Not established.

Bioaccumulative Potential

Phenolpthalein Indicator Solution

Bioaccumulative potential	Not established.

1,2-Propylene glycol (57-55-6)

BCF fish 1	1

Mobility In Soil Not available

Other Adverse Effects

Other information: Avoid release to the environment.

13. Disposal considerations

Waste disposal recommendations: Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

Additional information: Handle empty containers with care because residual vapors are flammable.

Ecology - waste materials: Avoid release to the environment.

14. Transport information

In accordance with ICAO/IATA/DOT/TDG

UN Number Not regulated for transport

UN Proper Shipping Name Not regulated for transport

Additional information Not regulated for transport

Overland transport Not regulated for transport

Transport by sea Not regulated for transport

Air transport Not regulated for transport

15. Regulatory information

US Federal regulations

1,2-Propylene glycol (57-55-6)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

EPA TSCA Regulatory Flag	Y2 - Y2 - indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

2-Propanol, 1-propoxy- (1569-01-3)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Phenolphthalein (77-09-8)

Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on SARA Section 313 (Specific toxic chemical listings)

SARA Section 313 - Emission Reporting	0.1 %

Water (7732-18-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

US State regulations

Phenolphthalein (77-09-8)

U.S. - California - Proposition 65 - Carcinogens List	WARNING: This product contains chemicals known to the State of California to cause cancer.

1,2-Propylene glycol (57-55-6)

U.S. - Minnesota - Hazardous Substance List

U.S. - New Jersey - Right to Know Hazardous Substance List

U.S. - Pennsylvania - RTK (Right to Know) List

U.S. - Texas - Effects Screening Levels - Long Term

U.S. - Texas - Effects Screening Levels - Short Term

2-Propanol, 1-propoxy- (1569-01-3)

U.S. - Texas - Effects Screening Levels - Long Term

U.S. - Texas - Effects Screening Levels - Short Term

Phenolphthalein (77-09-8)

U.S. - Illinois - Toxic Air Contaminant Carcinogens

U.S. - Maine - Chemicals of High Concern

U.S. - Minnesota - Chemicals of High Concern

U.S. - New Jersey - Right to Know Hazardous Substance List

U.S. - New Jersey - Special Health Hazards Substances List

U.S. - Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights 25 Feet to Less Than 40 Feet

U.S. - Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights 40 Feet to Less Than 75 Feet

U.S. - Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights 75 Feet or Greater

U.S. - Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights Less Than 25 Feet

Canadian regulations

Phenolpthalein Indicator Solution

WHMIS Classification	Class D Division 2 Subdivision B - Toxic material causing other toxic effects
	Class D Division 2 Subdivision A - Very toxic material causing other toxic effects
	Class B Division 3 - Combustible Liquid

1,2-Propylene glycol (57-55-6)

Listed on the Canadian DSL (Domestic Substances List) inventory.

Listed on the Canadian Ingredient Disclosure List

WHMIS Classification	Uncontrolled product according to WHMIS classification criteria

2-Propanol, 1-propoxy- (1569-01-3)

Listed on the Canadian DSL (Domestic Substances List) inventory.

Phenolphthalein (77-09-8)

Listed on the Canadian DSL (Domestic Substances List)

Water (7732-18-5)

Listed on the Canadian DSL (Domestic Substances List) inventory.

WHMIS Classification	Uncontrolled product according to WHMIS classification criteria

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by CPR.

16. Other information

Indication of changes : 05/20/2013

Other information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

GHS Full Text Phrases:

Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Carc. 1B	Carcinogenicity Category 1B
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Eye Irrit. 2B	Serious eye damage/eye irritation Category 2B
Flam. Liq. 3	Flammable liquids Category 3
Muta. 2	Germ cell mutagenicity Category 2
Repr. 2	Reproductive toxicity Category 2
Skin Irrit. 2	skin corrosion/irritation Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H226	Flammable liquid and vapor
H302	Harmful if swallowed
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H341	Suspected of causing genetic defects
H350	May cause cancer
H361	Suspected of damaging fertility or the unborn child

NFPA health hazard : 3 - Short exposure could cause serious temporary or residual injury even though prompt medical attention was given.

NFPA fire hazard : 3 - Liquids and solids that can be ignited under almost all ambient conditions.

NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.

HMIS III Rating

Health : 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given

Flammability : 2 Moderate Hazard

Physical : 0 Minimal Hazard

Party Responsible For The Preparation Of This Document:
OFI Testing Equipment

Phone Number: 832-320-7300832-320-7300

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.