

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name:	BIONIX ISO14	
Company Name:	Isomeric Industries Inc. 3400 Research Forest Drive, Suite B4 The Woodlands, TX 77381	Phone Number: (833)476-6374
Web site address:	www.isomericindustries.com	
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Information:	ISOMERIC Main	(833)476-6374 101

2. HAZARDS IDENTIFICATION

Acute Toxicity: Oral, Category 4
Acute Toxicity: Skin, Category 4
Acute Toxicity: Inhalation, Category 4
Skin Corrosion/Irritation, Category 1B
Serious Eye Damage/Eye Irritation, Category 1
Skin Sensitization, Category 1
Aquatic Toxicity (Acute), Category 2
Aquatic Toxicity (Chronic), Category 2



GHS Signal Word: **Danger**

GHS Hazard Phrases:

- H302 - Harmful if swallowed.
- H312 - Harmful in contact with skin.
- H314 - Causes severe skin burns and eye damage.
- H317 - May cause an allergic skin reaction.
- H318 - Causes serious eye damage.
- H332 - Harmful if inhaled.
- H401 - Toxic to aquatic life.
- H411 - Toxic to aquatic life with long lasting effects.

GHS Precautionary Phrases:

- P260 - Do not breathe dust/fume/gas/mist/vapors/spray.
- P264 - Wash hands thoroughly after handling.
- P270 - Do not eat, drink or smoke when using this product.
- P271 - Use only outdoors or in a well-ventilated area.
- P272 - Contaminated work clothing should not be allowed out of the workplace.
- P273 - Avoid release to the environment.
- P280 - Wear protective gloves/protective clothing/eye protection/face protection.

GHS Response Phrases:

- P301+312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
- P301+330+331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
- P302+352 - IF ON SKIN: Wash with plenty of soap and water.
- P303+361+353 - IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a POISON CENTER or doctor/physician.
P321 - Specific treatment see ... on this label.
P330 - Rinse mouth.
P333+313 - If skin irritation or rash occurs, seek medical advice/attention.
P362+364 - Take off contaminated clothing and wash it before reuse.
P391 - Collect spillage.
P405 - Store locked up.
P501 - Dispose of contents/container to an approved waste disposal plant.

GHS Storage and Disposal Phrases:

Medical Conditions Generally Aggravated By Exposure: Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS #	Hazardous Components (Chemical Name)	Concentration	
26172-55-4	5-Chloro-2-methyl-4-isothiazolin-3-one	10.0 -12.0 %	
2682-20-4	2-Methyl-4-isothiazolin-3-one	3.0 -5.0 %	
7786-30-3	Magnesium chloride	5.0 -7.0 %	
10377-60-3	Magnesium nitrate	18.0 -22.0 %	
7732-18-5	Water	46.0 -64.0 %	

4. FIRST AID MEASURES

Emergency and First Aid Procedures:

Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice.

In Case of Inhalation:

Remove to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/ attention. Immediately call a poison center or doctor/ physician.

In Case of Skin Contact:

Immediately remove contaminated clothing. Immediately call a poison center or doctor/physician. Immediately flush skin with plenty of water for at least 30 minutes. Get immediate medical advice/attention.

In Case of Eye Contact:

Immediately rinse with water for at least 30 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician. Get immediate medical advice/attention.

In Case of Ingestion:

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

Signs and Symptoms Of Exposure:

Symptoms/Injuries: Skin sensitization. Harmful if swallowed. Harmful in contact with skin. Harmful if inhaled. Causes severe skin burns and eye damage.
Injuries After Inhalation: Inhalation is likely to cause adverse health effects including but not limited to: irritation, difficulty breathing, and unconsciousness. May be corrosive to the respiratory tract.
Injuries After Skin Contact: May cause an allergic skin reaction. This material is harmful through skin contact, and can cause adverse health effects or death in significant amounts. This material may be absorbed through the skin and eyes. Causes severe irritation which will progress to chemical burns.
Injuries After Eye Contact: Causes permanent damage to the cornea, iris, or conjunctiva.
Injuries After Ingestion: This material is harmful orally and can cause adverse health

effects or death in significant amounts. May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

Chronic Symptoms: None expected under normal conditions of use.

Indication of any immediate medical attention and special treatment needed: If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

5. FIRE FIGHTING MEASURES

Flash Pt:

Explosive Limits:

LEL:

UEL:

Autoignition Pt:

Suitable Extinguishing Media: Water spray, fog, carbon dioxide (CO₂), alcohol-resistant foam, or dry chemical.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

Fire Fighting Instructions: Precautionary Measures Fire: Exercise caution when fighting any chemical fire.
Firefighting Instructions: Use water spray or fog for cooling exposed containers.
Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.
Other Information: Do not allow run-off from fire fighting to enter drains or water courses.

Flammable Properties and Hazards: Fire Hazard: Not considered flammable but may burn at high temperatures.
Explosion Hazard: Product is not explosive.
Reactivity: May react exothermically with water releasing heat. Adding an acid to a base or base to an acid may cause a violent reaction.

Hazardous Combustion Products: Hazardous Combustion Products: Carbon oxides (CO, CO₂). Compounds of nitrogen, hydrogen, and chlorine.

6. ACCIDENTAL RELEASE MEASURES

Protective Precautions, Protective Equipment and Emergency Procedures: General Measures: Do not get in eyes, on skin, or on clothing. Do not breathe vapor, mist or spray.

For Non-Emergency Personnel:

-Protective Equipment: Use appropriate personal protective equipment (PPE).

-Emergency Procedures: Evacuate unnecessary personnel.

For Emergency Personnel:

-Protective Equipment: Equip cleanup crew with proper protection.

-Emergency Procedures: Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.
Ventilate area.

Environmental Precautions: Prevent entry to sewers and public waters. Avoid release to the environment. Collect spillage.

Steps To Be Taken In Case Material Is Released Or Spilled: For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. As an immediate precautionary measure, isolate spill or leak area in all directions. Ventilate area.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely.

Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill. Cautiously neutralize spilled liquid.

7. HANDLING AND STORAGE

Precautions To Be Taken in Handling:

Precautions for Safe Handling: Do not breathe mist, spray, vapors. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Handle empty containers with care because they may still present a hazard. Do not get in eyes, on skin, or on clothing. Use only outdoors or in a well-ventilated area.
Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

Precautions To Be Taken in Storing:

Technical Measures: Comply with applicable regulations.
Storage Conditions: Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Store in original container or corrosive resistant and/or lined container. Store locked up/in a secure area.
Incompatible Materials: Strong acids, strong bases, strong oxidizers.

Other Precautions:

May release corrosive vapors.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
26172-55-4	5-Chloro-2-methyl-4-isothiazolin-3-one			
2682-20-4	2-Methyl-4-isothiazolin-3-one			
7786-30-3	Magnesium chloride			
10377-60-3	Magnesium nitrate			
7732-18-5	Water			

Personal Protective

Equipment Symbols:

Respiratory Equipment (Specify Type):

If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

Eye Protection:

Chemical safety goggles and face shield.

Protective Gloves:

Chemical resistant protective gloves.

Other Protective Clothing:

Wear protective clothing appropriate to the risk of exposure.

Engineering Controls (Ventilation etc.):

Control Parameters:

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), or OSHA (PEL).
Exposure Controls

Appropriate Engineering Controls:

Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed. Gas detectors should be used when toxic gases may be released. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Work/Hygienic/Maintenance Practices:

Personal Protective Equipment:
Gloves. Protective clothing. Protective goggles. Insufficient ventilation: wear respiratory protection. Face shield.

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical States: ☐ Gas ☒ Liquid ☐ Solid

Appearance and Odor: Appearance: Clear. yellow.
Odor: Mild.

pH:

Melting Point: -33.00 C (-27.4 F)

Boiling Point: 100.00 C (212.0 F)

Flash Pt:

Evaporation Rate: < 1

Flammability (solid, gas):

Explosive Limits: LEL: UEL:

Vapor Pressure (vs. Air or mm Hg):

Vapor Density (vs. Air = 1): 0.62

Specific Gravity (Water = 1):

Density: 1.27 - 1.33 G/ML

Solubility in Water: soluble

Octanol/Water Partition Coefficient: 0.401

Autoignition Pt:

Decomposition Temperature:

Viscosity: 16 cP

10. STABILITY AND REACTIVITY

Reactivity: May react exothermically with water releasing heat. Adding an acid to a base or base to an acid may cause a violent reaction.

Stability: Unstable ☐ Stable ☒

Conditions To Avoid - Stable under recommended handling and storage conditions (see section 7).

Instability: Conditions to Avoid: Direct sunlight, extremely high or low temperatures, and incompatible materials.

Incompatibility - Materials To Strong acids, strong bases, strong oxidizers.

Avoid:

Hazardous Decomposition or Thermal decomposition generates: Corrosive vapors.

Byproducts:

Possibility of Hazardous Will occur ☐ Will not occur ☒

Reactions:

Conditions To Avoid -

Hazardous polymerization does not occur.

Hazardous Reactions:

11. TOXICOLOGICAL INFORMATION

Toxicological Information:

Acute Toxicity: Not classified
BIONIX ISO14
ATE (Oral): 727.27 mg/kg body weight
ATE (Dermal): 1,857.59 mg/kg body weight
ATE (Dust/Mist): 2.41 mg/l/4h

3(2H)-Isothiazolone, 2-methyl- (2682-20-4)
LD50 Oral Rat: 120 mg/kg
LD50 Dermal Rabbit: 200 mg/kg
LC50 Inhalation Rat: 0.11 mg/l/4h

3(2H)-Isothiazolone, 5-chloro-2-methyl- (26172-55-4)
LD50 Oral Rat: 481 mg/kg
LC50 Inhalation Rat: 1.23 mg/l/4h
ATE (Oral): 100.00 mg/kg body weight
ATE (Dermal): 300.00 mg/kg body weight.

Germ Cell Mutagenicity: Not classified
Carcinogenicity: Not classified
Reproductive Toxicity: Not classified
Specific Target Organ Toxicity (Single Exposure): Not classified
Specific Target Organ Toxicity (Repeated Exposure): Not classified
Aspiration Hazard: Not classified.

Irritation or Corrosion:

Skin Corrosion/Irritation: Causes severe skin burns and eye damage. pH: 2 - 4
Serious Eye Damage/Irritation: Causes serious eye damage. pH: 2 - 4
Respiratory or Skin Sensitization: May cause an allergic skin reaction.

**Symptoms related to
Toxicological
Characteristics:**

Symptoms/Injuries After Inhalation: Inhalation is likely to cause adverse health effects including but not limited to: irritation, difficulty breathing, and unconsciousness. May be corrosive to the respiratory tract.
Symptoms/Injuries After Skin Contact: May cause an allergic skin reaction. This material is harmful through skin contact, and can cause adverse health effects or death in significant amounts. This material may be absorbed through the skin and eyes. Causes severe irritation which will progress to chemical burns.
Symptoms/Injuries After Eye Contact: Causes permanent damage to the cornea, iris, or conjunctiva.
Symptoms/Injuries After Ingestion: This material is harmful orally and can cause adverse health effects or death in significant amounts. May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

**Chronic Toxicological
Effects:**

Chronic Symptoms: None expected under normal conditions of use.

Carcinogenicity:

NTP? No IARC Monographs? No OSHA Regulated? No

12. ECOLOGICAL INFORMATION

General Ecological Information:	Ecology - General: Toxic to aquatic life with long lasting effects. 3(2H)-Isothiazolone, 5-chloro-2-methyl- (26172-55-4): LC50 Fish 1: 1.6 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [semi-static]) EC50 Daphnia 1: 4.71 mg/l (Exposure time: 48 h - Species: Daphnia magna) EC50 Daphnia 2: 0.12 (0.12 - 0.3) mg/l (Exposure time: 48 h - Species: Daphnia magna [Flow through])
Persistence and Degradability:	May cause long-term adverse effects in the environment.
Bioaccumulative Potential:	BIONIX ISO14 Bioaccumulative Potential: Not established. 3(2H)-Isothiazolone, 5-chloro-2-methyl- (26172-55-4) Log Pow: -0.71 - 0.75 (at 20 °C)
Mobility in Soil:	No additional information available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method:	Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, and international regulations. Additional Information: Container may remain hazardous when empty. Continue to observe all precautions. Ecology - Waste Materials: Avoid release to the environment. This material is hazardous to the aquatic environment. Keep out of sewers and waterways.
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14. TRANSPORT INFORMATION

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name:	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (2-Methyl-3(2H)-isothiazolone, 5-Chloro-2- methyl-3(2H)-isothiazolone)		
DOT Hazard Class:	8	CORROSIVE	
UN/NA Number:	3265	Packing Group:	II



MARINE TRANSPORT (IMDG/IMO):

IMDG/IMO Shipping Name:	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (2-Methyl-3(2H)-isothiazolone, 5-Chloro-2- methyl-3(2H)-isothiazolone)		
UN Number:	3265	Packing Group:	II
Hazard Class:	8 - CORROSIVE		
IMDG EMS Number:	F-A, S-B	IMDG MFAG Number:	
IMDG EMS Page:			

AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name:	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (2-Methyl-3(2H)-isothiazolone, 5-Chloro-2- methyl-3(2H)-isothiazolone)		
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15. REGULATORY INFORMATION

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS #	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
26172-55-4	5-Chloro-2-methyl-4-isothiazolin-3-one	No	No	No
2682-20-4	2-Methyl-4-isothiazolin-3-one	No	No	No
7786-30-3	Magnesium chloride	No	No	No
10377-60-3	Magnesium nitrate	No	No	No
7732-18-5	Water	No	No	No

CAS #	Hazardous Components (Chemical Name)	Other US EPA or State Lists
26172-55-4	5-Chloro-2-methyl-4-isothiazolin-3-one	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory, 12(b); FIFRA: Yes - Active - 107103: Am, Inert: F/NF; FDA/DEA CSA: No; CA PROP.65: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NJ EHS: No; PA HSL: No
2682-20-4	2-Methyl-4-isothiazolin-3-one	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory, 12(b); FIFRA: Yes - Active - 107104: Am, Inert: F/NF; FDA/DEA CSA: No; CA PROP.65: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NJ EHS: No; PA HSL: No
7786-30-3	Magnesium chloride	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; FIFRA: Yes - Active - 013902: Am/CC, Inert: F/NF; FDA/DEA CSA: No; CA PROP.65: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NJ EHS: No; PA HSL: No
10377-60-3	Magnesium nitrate	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; FIFRA: Yes - Inert: F/NF; FDA/DEA CSA: No; CA PROP.65: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NJ EHS: No; PA HSL: Yes - 1
7732-18-5	Water	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; FIFRA: Yes - Inert: F/NF/Fr; FDA/DEA CSA: No; CA PROP.65: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NJ EHS: No; PA HSL: No

CAS #	Hazardous Components (Chemical Name)	International Regulatory Lists
26172-55-4	5-Chloro-2-methyl-4-isothiazolin-3-one	Canadian DSL: Yes; Canadian NDSL: No
2682-20-4	2-Methyl-4-isothiazolin-3-one	Canadian DSL: Yes; Canadian NDSL: No
7786-30-3	Magnesium chloride	Canadian DSL: Yes; Canadian NDSL: No
10377-60-3	Magnesium nitrate	Canadian DSL: Yes; Canadian NDSL: No
7732-18-5	Water	Canadian DSL: Yes; Canadian NDSL: No

16. OTHER INFORMATION

Revision Date: 11/13/2019

Additional Information About

This Product:

Company Policy or

Disclaimer:

Notice to Reader: The information herein is based on data considered accurate.

However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. ISOMERIC INDUSTRIES INC. assumes no responsibility for personal or property damage to vendors, users, or third parties caused by the material. Such vendors or users assume all risks associated with the use of the material.