

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: **BIONIX GA50**

Company Name: Isomeric Industries Inc.
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The Woodlands, TX 77381

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Email address: info@isomericindustries.com

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Information: ISOMERIC Main

ID: 104065 (800)535-5053
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Hazard Rating System:

HEALTH		3
FLAMMABILITY		1
PHYSICAL		0
PPE		Jq

HMIS:

NFPA:

Flammability	1	Instability
Health	3	0
		Special Hazard

2. HAZARDS IDENTIFICATION

Acute Toxicity: Oral, Category 3
Skin Corrosion/Irritation, Category 1B
Skin Sensitization, Category 1
Acute Toxicity: Inhalation, Category 2
Respiratory Sensitization, Category 1
Aquatic Toxicity (Acute), Category 2
Aquatic Toxicity (Chronic), Category 2
Specific Target Organ Toxicity (single exposure), Category 3
Serious Eye Damage/Eye Irritation, Category 1



GHS Signal Word: **Danger**

GHS Hazard Phrases:

H301 - Toxic if swallowed.
H314 - Causes severe skin burns and eye damage.
H317 - May cause an allergic skin reaction.
H318 - Causes serious eye damage.
H330 - Fatal if inhaled.
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335 - May cause respiratory irritation.
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:

P284 - Wear respiratory protection .
P285 - In case of inadequate ventilation wear respiratory protection.
P301+310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
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.
P341 - If breathing is difficult, remove 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.
P342+311 - If experiencing respiratory symptoms call a POISON CENTER or doctor/physician.
P363 - Wash contaminated clothing before reuse.
P391 - Collect spillage.

GHS Storage and Disposal Phrases:

P405 - Store locked up.
P501 - Dispose of contents/container to ...

Potential Health Effects (Acute and Chronic):

Chronic: Chronic exposure may cause effects similar to those of acute exposure.

Inhalation:

Causes respiratory tract irritation. May cause allergic respiratory reaction. May be harmful if inhaled. Inhalation of high concentrations may cause coughing and shortness of breath.

Skin Contact:

Causes skin irritation. May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material. May be harmful if absorbed through the skin.

Eye Contact:

Causes eye irritation.

Ingestion:

May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May be harmful if swallowed.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS #	Hazardous Components (Chemical Name)	Concentration	
111-30-8	Glutaraldehyde	45.0 -55.0 %	
67-56-1	Methanol	<=0.5 %	

4. FIRST AID MEASURES

Emergency and First Aid Procedures:	Immediately remove contaminated clothing. If danger of loss of consciousness, place patient in recovery position and transport accordingly. Apply artificial respiration if necessary. First aid personnel should pay attention to their own safety.
In Case of Inhalation:	Keep patient calm. Remove from exposure and move to fresh air immediately. Seek medical attention. Immediately administer a corticosteroid from a controlled/metered dose inhaler.
In Case of Skin Contact:	Immediately wash thoroughly with plenty of water, apply sterile dressings. Consult a skin specialist.
In Case of Eye Contact:	Immediately flush eyes with large amounts of water for at least 30 minutes. Consult a physician.
In Case of Ingestion:	Immediately rinse mouth and then drink 200-300 ml of water. Seek medical attention.
Note to Physician:	Treat according to symptoms (decontamination, vital function), no known specific antidote. Pulmonary odema prophylaxis. Medical monitoring for at least 24 hours.

5. FIRE FIGHTING MEASURES

Flash Pt:	> 302.00 F (150.0 C)	Method Used:	Closed Cup
Explosive Limits:	LEL:	UEL:	
Autoignition Pt:			
Suitable Extinguishing Media:	Water spray. Dry powder. Carbon dioxide (CO2). Foam.		
Fire Fighting Instructions:	Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.		
Flammable Properties and Hazards:			
Hazardous Combustion Products:			

6. ACCIDENTAL RELEASE MEASURES

Protective Precautions, Protective Equipment and Emergency Procedures:	Wear appropriate respiratory protection. Use personal protective equipment. Ensure adequate ventilation.
Environmental Precautions:	Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.
Steps To Be Taken In Case Material Is Released Or Spilled:	For large amounts: Pump off product. For residues: Pick up with suitable absorbent material (e.g. sand, sawdust, general-purpose binder, kieselguhr). Dispose of absorbed material in accordance with regulations. Spills should be contained, solidified, and placed in suitable containers for disposal.

7. HANDLING AND STORAGE

Precautions To Be Taken in Handling:	Ensure thorough ventilation of stores and work areas. Avoid all sources of ignition: heat, sparks, open flame. Avoid aerosol formation.
Precautions To Be Taken in Storing:	Segregate from acids and bases. Segregate from strong oxidizing agents. Suitable materials for containers: High density polyethylene (HDPE), Low density polyethylene (LDPE), Stove-lacquer RDL 50, glass. Unsuitable materials for containers: Paper/Fibreboard, board, Carbon steel (Iron). Keep container tightly closed in a dry and well-ventilated place. Store in a cool, dry

place. Store protected against freezing.
Storage temperature: ≤ 25 C.
Storage duration: 12 Months.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
111-30-8	Glutaraldehyde		CEIL: 0.05 ppm	
67-56-1	Methanol	PEL: 200 ppm	TLV: 200 ppm STEL: 250 ppm	

Personal Protective Equipment Symbols:



CAS #	Chemical Name	Jurisdiction	Recommended Exposure Limits	Notations
111-30-8	Glutaraldehyde	NIOSH	CEIL: 0.8 mg/m ³ (0.2 ppm)	
67-56-1	Methanol	NIOSH	TWA: 200 ppm STEL: 250 ppm	Skin Absorption

Respiratory Equipment (Specify Type):

Wear a NIOSH-certified (or equivalent) organic vapor/particulate respirator. Do not exceed the maximum use concentration for the respirator facepiece/cartridge combination. For emergency or non-routine, high exposure situation, use a NIOSH-certified full facepiece pressure demand self-contained breathing apparatus (SCBA) or a full facepiece pressure demand supplied-air respirator (SAR) with escape provisions.

Eye Protection:

Wear chemical splash goggles. Wear a face shield if splashing hazard exists.

Protective Gloves:

Chemical resistant protective gloves.

Other Protective Clothing:

Body protection must be chosen depending on activity and possible exposure, e.g. head protection, apron, protective boots, chemical-protection suit.

Engineering Controls (Ventilation etc.):

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Work/Hygienic/Maintenance Practices:

Eye wash fountains and safety showers must be easily accessible. Wear protective clothing as necessary to prevent contact. Avoid inhalation of vapors/mists. Wash soiled clothing immediately. When using do not eat or drink. Wash hands and face before breaks and at the end of the shift. Gloves must be inspected regularly and prior to each use. Replace if necessary (e.g. pinhole leaks). Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. Store work clothing separately.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical States: ☐ Gas ☒ Liquid ☐ Solid

Appearance and Odor: pungent odor.
Colorless to yellow.

pH: 3.0 - 5.0

Melting Point: ~ -18.00 C (-0.4 F)

Boiling Point: 101.00 C (213.8 F)

Flash Pt: > 302.00 F (150.0 C) Method Used: Closed Cup

Evaporation Rate: NA

Flammability (solid, gas):

Explosive Limits: LEL: UEL:

Vapor Pressure (vs. Air or mm Hg): NA

Vapor Density (vs. Air = 1): NA

Specific Gravity (Water = 1): 1.08 - 1.18

Solubility in Water: Soluble.

Octanol/Water Partition Coefficient:

Autoignition Pt:

Decomposition Temperature: 110.00 C (230.0 F)

Viscosity: NA

Molecular Formula & Weight: Solution 0.0

10. STABILITY AND REACTIVITY

Reactivity: No corrosive effect on metal.
Based on its structural properties the product is not classified as oxidizing.
Forms no flammable gases in the presence of water.

Stability: Unstable ☐ Stable ☒

Conditions To Avoid - Instability: Incompatible materials.

Incompatibility - Materials To Avoid: Acids. Bases. Amines.

Hazardous Decomposition or Byproducts: Carbon Dioxide and Carbon Monoxide.

Possibility of Hazardous Reactions: Will occur ☐ Will not occur ☒

Conditions To Avoid - Hazardous Reactions:

11. TOXICOLOGICAL INFORMATION

Toxicological Information:	<p>Epidemiology: No information found.</p> <p>Teratogenicity: No information available. Reproductive Effects: Mutagenicity: Neurotoxicity:</p> <p>CAS# 111-30-8: Glutaraldehyde: Acute toxicity, LD50, Oral, Rat, 134.0 MG/KG; Oyo Yakuri. Pharmacometrics., Oyo Yakuri Kenkyukai, CPO Box 180, Sendai 980-91 Japan, Vol/p/yr: 19,503, 1980</p> <p>Acute toxicity, LC50, Inhalation, Rat, 480.0 MG/M3, 4 H; United States Environmental Protection Agency, Office of Pesticides and Toxic Substances., U.S. Environmental Protection Agency, Office of Pesticides and Toxic Substances, 401 M St., SW, Washington, DC 20460, Vol/p/yr: 8EHQ-1290-,</p> <p>Acute toxicity, LD50, Skin, Rat, > 2500. MG/KG. Result: Skin and Appendages: Skin: After systemic exposure: Dermatitis, other. ; Oyo Yakuri. Pharmacometrics., Oyo Yakuri Kenkyukai, CPO Box 180, Sendai 980-91 Japan, Vol/p/yr: 12,11, 1976</p> <p>Standard Draize Test, Skin, Human, 6.000 MG, 3 D; Cutaneous Toxicity, Proceedings of the 3rd Conference, 1976, D, V.A., and P. L, New York, Academic Press, Inc., London United Kingdom, Vol/p/yr: -,127, 1977</p>
Symptoms related to Toxicological Characteristics:	<p>The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11., Further symptoms are possible.</p>
Carcinogenicity/Other Information:	<p>CAS# 111-30-8: Not listed by ACGIH, IARC, NTP, or CA Prop 65.</p> <p>CAS# 62-56-6: ACGIH: Not listed.</p> <p>California: carcinogen, initial date 1/1/88. NTP: Suspect carcinogen.</p>
Carcinogenicity:	<p>NTP? No IARC Monographs? No OSHA Regulated? No</p>

12. ECOLOGICAL INFORMATION

General Ecological Information:	<p>Acutely toxic for aquatic organisms. Toxic to aquatic organisms based on long-term (chronic) toxicity study data. Depending on local conditions and existing concentrations, disturbances in the biodegradation process of activated sludge are possible.</p> <p>CAS# 111-30-8: Glutaraldehyde: LC50, Bluegill (<i>Lepomis macrochirus</i>), 22.60 PPM, 96 H, Mortality. Result: no hazard identified. ; Pesticide Ecotoxicity Database (Formerly: Environmental Effects Database (EEDB)), Office of Pesticide Programs, 2000</p> <p>LC50, Bluegill (<i>Lepomis macrochirus</i>), 12.20 PPM, 96 H, Mortality. Result: no hazard identified. ; Pesticide Ecotoxicity Database (Formerly: Environmental Effects Database (EEDB)), Office of Pesticide Programs, 2000</p> <p>LC50, Rainbow Trout (<i>Oncorhynchus mykiss</i>), 23.90 PPM, 96 H, Mortality. Result: no hazard identified. ; Pesticide Ecotoxicity Database (Formerly: Environmental Effects Database (EEDB)), Office of Pesticide Programs, 2000</p> <p>Effective concentration to 50% of test organisms., Water Flea (<i>Daphnia magna</i>), 0.750 PPM, 48 H, Intoxication,. Result: no hazard identified. ; Pesticide Ecotoxicity Database (Formerly: Environmental Effects Database (EEDB)), Office of Pesticide Programs, 2000</p> <p>Effective concentration to 50% of test organisms., Water Flea (<i>Daphnia magna</i>), 3.500 PPM, 48 H, Intoxication,. Result: ECHA REACH Guidance. ; Pesticide Ecotoxicity Database (Formerly: Environmental Effects Database (EEDB)), Office of Pesticide Programs, 2000</p> <p>Effective concentration to 50% of test organisms., American Or Virginia Oyster (<i>Crassostrea virginica</i>), spat, 0.780 PPM, 96 H, Intoxication,. Result: ECHA REACH</p>
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Guidance. ; Pesticide Ecotoxicity Database (Formerly: Environmental Effects Database (EEDB)), Office of Pesticide Programs, 2000

LC50, Opossum Shrimp (*Americamysis bahia*), 7.100 PPM, 96 H, Mortality. Result: no hazard identified. ; Pesticide Ecotoxicity Database (Formerly: Environmental Effects Database (EEDB)), Office of Pesticide Programs, 2000

Effective concentration to 50% of test organisms., Green Algae (*Pseudokirchneriella subcapitata*), Exponential Growth Phase, 3.950 MG/L, 48 H, Physiology, Water temperature: 24.00 C (75.2 F) C. Result: no hazard identified. ; Individual and Combined Toxicity of Nitriles and Aldehydes to *Raphidocelis subcapitata*, Chen, C.Y., S.L. Chen, and E.R. Christensen, 2005

Effective concentration to 50% of test organisms., Green Algae (*Pseudokirchneriella subcapitata*), Exponential Growth Phase, 13.20 MG/L, 48 H, Population, Water temperature: 24.00 C (75.2 F) C. Result: no hazard identified. ; Individual and Combined Toxicity of Nitriles and Aldehydes to *Raphidocelis subcapitata*, Chen, C.Y., S.L. Chen, and E.R. Christensen, 2005

Persistence and Degradability:

Readily biodegradable.

Bioaccumulative Potential:

No significant accumulation in organisms is expected as a result of the distribution coefficient of n-octanol/water (log Pow)

Mobility in Soil:

The substance will not evaporate into the atmosphere from the water surface. Adsorption to solid soil phase is possible.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method:

Waste Disposal of Substances.

Incinerate in suitable incineration plant, observing local authority regulations. Do not discharge substance/product into sewer systems. Incinerate or dispose of in a RCRA-licensed facility.

Container Disposal.

Dispose of in a licensed facility. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

RACA: D002.

14. TRANSPORT INFORMATION

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: CORROSIVE LIQUID, TOXIC, N.O.S. (contains GLUTARALDEHYDE)

DOT Hazard Class: 8 (6.1T) CORROSIVE, TOXIC

UN/NA Number: 2922 **Packing Group:** II



MARINE TRANSPORT (IMDG/IMO):

IMDG/IMO Shipping Name: CORROSIVE LIQUID, TOXIC, N.O.S. (contains GLUTARALDEHYDE)

UN Number: 2922 **Packing Group:** II

Hazard Class: 8 (6.1T) - CORROSIVE, TOXIC

IMDG MFAG Number:

Marine Pollutant: Yes

IMDG EMS Page:

AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name: CORROSIVE LIQUID, TOXIC, N.O.S. (contains GLUTARALDEHYDE)

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)
111-30-8	Glutaraldehyde	No	No	No
67-56-1	Methanol	No	Yes 5000 LB	Yes

CAS #	Hazardous Components (Chemical Name)	Other US EPA or State Lists
111-30-8	Glutaraldehyde	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory, 8A PAIR; FIFRA: Yes - Active - 043901: Am, Inert: 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
67-56-1	Methanol	CAA HAP,ODC: HAP: VHAP; CWA NPDES: No; TSCA: Yes - Inventory; FIFRA: Yes - Active - 053801: Am/CC, Inert: F/NF/Fr; FDA/DEA CSA: No; CA PROP.65: Yes: RDTox.; MA Oil/HazMat: Yes; MI CMR, Part 5: Part 5; NJ EHS: Yes - 1222; PA HSL: Yes - E

CAS #	Hazardous Components (Chemical Name)	International Regulatory Lists
111-30-8	Glutaraldehyde	Canadian DSL: Yes; Canadian NDSL: No
67-56-1	Methanol	Canadian DSL: Yes; Canadian NDSL: No

16. OTHER INFORMATION

Revision Date: 12/02/2019

Additional Information About

This Product:

Company Policy or

Disclaimer:

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