

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: **BIONIX DAZ20**

Company Name: Isomeric Industries Inc.
3400 Research Forest Drive, Suite B4
The Woodlands, TX 77381

Phone Number: (678)713-4275

Web site address: www.isomericindustries.com

Email address: info@isomericindustries.com

Emergency Contact: INFOTRAC United States & Canada (800)535-5053

Hazard Rating System:

HEALTH		2
FLAMMABILITY		0
PHYSICAL		0
PPE		B

HMIS:

NFPA:

Flammability	0	Instability
Health	2	0
NFPA:		Special Hazard

2. HAZARDS IDENTIFICATION

Skin Sensitization, Category 1
Serious Eye Damage/Eye Irritation, Category 1
Skin Corrosion/Irritation, Category 3
Acute Toxicity: Inhalation, Category 4
Acute Toxicity: Oral, Category 4
Specific Target Organ Toxicity (single exposure), Category 3



GHS Signal Word: **Danger**

GHS Hazard Phrases:

H302 - Harmful if swallowed.
H316 - Causes mild skin irritation.
H317 - May cause an allergic skin reaction.
H318 - Causes serious eye damage.
H332 - Harmful if inhaled.
H335 - May cause respiratory irritation.

GHS Precautionary Phrases:

P261 - Avoid breathing 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.
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.
P302+352 - IF ON SKIN: Wash with plenty of soap and water.
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.
P332+313 - If skin irritation occurs, get medical advice/attention.
P333+313 - If skin irritation or rash occurs, seek medical advice/attention.
P363 - Wash contaminated clothing before reuse.

GHS Storage and Disposal Phrases:

P403+233 - Store container tightly closed in well-ventilated place.
P405 - Store locked up.
P501 - Dispose of contents/container to ...

Potential Health Effects (Acute and Chronic):

Harmful if swallowed. Causes serious eye irritation. Causes skin irritation. Harmful if inhaled.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS #	Hazardous Components (Chemical Name)	Concentration	
533-74-4	Dazomet	>20.0 %	

4. FIRST AID MEASURES

Emergency and First Aid Procedures:

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

In Case of Inhalation:

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In Case of Skin Contact:

Wash off with soap and plenty of water. Consult a physician.

In Case of Eye Contact:

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

In Case of Ingestion:

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Signs and Symptoms Of Exposure:

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

Indication of any immediate medical attention and special treatment needed:

No data available.

5. FIRE FIGHTING MEASURES

Flash Pt: > 212.00 F (100.0 C)

Explosive Limits: LEL: UEL:

Autoignition Pt:

Suitable Extinguishing Media: Dry chemical or CO₂.

Unsuitable Extinguishing Media: DO NOT USE WATER OR FOAM.

Fire Fighting Instructions: Wear self contained breathing apparatus for fire fighting if necessary.

Flammable Properties and Hazards: Carbon oxides, nitrogen oxides (NO_x).

Hazardous Combustion Products: The material will not burn until water has evaporated. Burning may produce irritant fumes.

6. ACCIDENTAL RELEASE MEASURES

**Protective Precautions,
Protective Equipment and
Emergency Procedures:**

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

Environmental Precautions:

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

**Steps To Be Taken In Case
Material Is Released Or
Spilled:**

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

**Precautions To Be Taken in
Handling:**

Avoid inhalation of vapor or mist. Keep away from heat, sparks and flame. Wash thoroughly after handling. Avoid contact with eyes, skin, and clothing.

**Precautions To Be Taken in
Storing:**

Do not freeze. Keep container tightly closed in a dry and well-ventilated place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
533-74-4	Dazomet			

**Personal Protective
Equipment Symbols:**



**Respiratory Equipment
(Specify Type):**

NIOSH/MSHA approved respirator.

Eye Protection:

Safety glasses with side-shields conforming to EN166.

Protective Gloves:

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Other Protective Clothing:

Complete suit protecting against chemicals.

**Engineering Controls
(Ventilation etc.):**

Use with adequate ventilation.

**Work/Hygienic/Maintenance
Practices:**

Handle in accordance with good industrial hygiene and safety practice.

**Environmental Exposure
Controls:**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical States: ☐ Gas ☒ Liquid ☐ Solid

Appearance and Odor: White.
pungent odor.

pH: 8.2

Melting Point: NA

Boiling Point: > 212.00 F (100.0 C)

Flash Pt: > 212.00 F (100.0 C)

Evaporation Rate:

Flammability (solid, gas):

Explosive Limits: LEL: UEL:

Vapor Pressure (vs. Air or mm Hg):

Vapor Density (vs. Air = 1):

Specific Gravity (Water = 1): 1.06 at 25.0 C (77.0 F)

Solubility in Water:

Octanol/Water Partition

Coefficient:

Autoignition Pt:

Decomposition Temperature:

Viscosity:

10. STABILITY AND REACTIVITY

Reactivity: No data available.

Stability: Unstable ☐ Stable ☒

Conditions To Avoid - Avoid extreme temperatures. Do not freeze.

Instability:

Incompatibility - Materials To Strong bases, Strong oxidizing agents, Strong acids.

Avoid:

Hazardous Decomposition or No data available. In the event of fire: see section 5.

Byproducts:

Possibility of Hazardous Will occur ☐ Will not occur ☒

Reactions:

Conditions To Avoid - No data available.

Hazardous Reactions:

11. TOXICOLOGICAL INFORMATION

Toxicological Information: Acute toxicity.

Nutritional and Gross Metabolic: Changes in: Body temperature decrease.

Germ cell mutagenicity: No data available.

Reproductive toxicity. Aspiration hazard:

CAS# 533-74-4: Dazomet: Acute toxicity, LD50, Oral, Rat, 320.0 MG/KG. Result:

Behavioral: Convulsions or effect on seizure threshold. Nutritional and Gross

Metabolic: Changes in: Body temperature decrease. ; Toxicology and Applied

Pharmacology, Academic Press, Inc., 1 E. First St., Duluth, MN 55802, Vol/p/yr: 9,521, 1966

Acute toxicity, LC50, Inhalation, Rat, 8400. MG/M3, 4 H. Result: Cardiac: Arrhythmias

(including changes in conduction). Vascular: BP lowering not characterized in

autonomic section. Kidney, Ureter, Bladder: Hematuria. ; Pesticide Manual., The British Crop Protection Council, 20 Bridport Rd., Thornton Heath CR4 7QG UK, Vol/p/yr: 9,225, 1991

Acute toxicity, LD50, Skin, Rat, 2260. MG/KG. Result: Behavioral: Somnolence (general depressed activity). Behavioral: Muscle weakness. Lungs, Thorax, or

Respiration: Dyspnea. ; Nippon Noyaku Gakkaishi. Journal of the Pesticide Science

Society of Japan., Nippon Noyaku Gakkai, 1-43-11, Komagome, Toshima-ku, Tokyo 170 Japan, Vol/p/yr: 17, S327, 1992

Acute toxicity, LD50, Oral, Mouse, 180.0 MG/KG. Result: Behavioral: Convulsions or effect on seizure threshold. ; Toxicology and Applied Pharmacology, Academic Press, Inc., 1 E. First St., Duluth, MN 55802, Vol/p/yr: 9,521, 1966

Acute toxicity, LD50, Skin, Mouse, 2400. MG/KG. Result: Behavioral: Somnolence (general depressed activity). Behavioral: Muscle weakness. Lungs, Thorax, or

Respiration: Dyspnea. ; Nippon Noyaku Gakkaishi. Journal of the Pesticide Science

Society of Japan., Nippon Noyaku Gakkai, 1-43-11, Komagome, Toshima-ku, Tokyo 170 Japan, Vol/p/yr: 17, S327, 1992

Standard Draize Test, Eyes, Species: Rabbit, 500.0 MG, 24 H. Result: Behavioral:

Headache. Lungs, Thorax, or Respiration: Other changes. ; Prehled Prumyslove

Toxikologie, Marhold, J., Organické Latky, Prague Czechoslovakia, Vol/p/yr: -, 1103, 1986

Irritation or Corrosion: Skin corrosion/irritation. Serious eye damage/eye irritation: Eyes. Rabbit. Result:

Sensitization: No data available.

Chronic Toxicological Effects: Specific target organ toxicity - single exposure: No data available.

Specific target organ toxicity - repeated exposure: no data available.

Carcinogenicity/Other Information: IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Carcinogenicity: NTP? No IARC Monographs? No OSHA Regulated? No

12. ECOLOGICAL INFORMATION

General Ecological Information:

This product is extremely toxic to fish and other aquatic organisms.
CAS# 533-74-4: Dazomet: LC50, Bluegill (*Lepomis macrochirus*), 32.00 AI MG/L, 24 H, Mortality, Water temperature: 21.00 C (69.8 F) C, pH: 7.40, Hardness: 35.00 MG/L. Result: No observed effect. ; Initial Submission: Acute Toxicity Study with Tetrahydro-3,5-Dimethyl-2H-1,3,5-Thiadiazine-2-Thione in Bluegill and Rainbow Trout with Cover Letter Dated 042392, Monsanto Co., 1992
LC50, Rainbow Trout (*Oncorhynchus mykiss*), 24.00 - 32.00 AI MG/L, 24 H, Mortality, Water temperature: 12.00 C (53.6 F) C, pH: 7.40, Hardness: 35.00 MG/L. Result: No observed effect. ; Initial Submission: Acute Toxicity Study with Tetrahydro-3,5-Dimethyl-2H-1,3,5-Thiadiazine-2-Thione in Bluegill and Rainbow Trout with Cover Letter Dated 042392, Monsanto Co., 1992
LC50, Water Flea (*Daphnia magna*), 0.880 AI MG/L, 24 H, Mortality, Water temperature: 21.00 C (69.8 F) C, pH: 7.10, Hardness: 35.00 MG/L. Result: No observed effect. ; Initial Submission: Acute Toxicity Study with Tetrahydro-3,5-Dimethyl-2H-1,3,5-Thiadiazine-2-Thione in *Daphnia magna* with Cover Letter Dated 042392, Monsanto Co., 1992

Results of PBT and vPvB assessment:

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

Persistence and Degradability:

No data available.

Bioaccumulative Potential:

No data available.

Mobility in Soil:

No data available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method:

Product:
Contact a licensed professional waste disposal service to dispose of this material.
Dispose in accordance with local, state, and federal regulations.

14. TRANSPORT INFORMATION

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Not Regulated.

DOT Hazard Class:

UN/NA Number:

AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name: Not Regulated.

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)
533-74-4	Dazomet	No	No	Yes
CAS #	Hazardous Components (Chemical Name)	Other US EPA or State Lists		
533-74-4	Dazomet	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; FIFRA: Yes - Active - 035602: Am/CC; FDA/DEA CSA: No; CA PROP.65: No; MA Oil/HazMat: No; MI CMR, Part 5: Part 5; NJ EHS: Yes - 3664; PA HSL: No		



SAFETY DATA SHEET

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CAS #	Hazardous Components (Chemical Name)	International Regulatory Lists
533-74-4	Dazomet	Canadian DSL: Yes; Canadian NDSL: No

16. OTHER INFORMATION

Revision Date: 04/20/2017

Additional Information About This Product:

Company Policy or Disclaimer:

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