

1. Product and Company Identification

1.1	Product name	Glucose (hexokinase) Reagent
	Substance/mixture	Mixture
	CAS #	Mixture
	Kit number	MD-101110
1.2	Recommended product use	
	Mixture's intended use	Diagnostic reagent for IN VITRO quantitative measurement of glucose in urine.
	Product restrictions	None known
1.3	Details of the supplier of the safety data sheet	
	Manufacturer information	
	Corporate Headquarters	Diamond Diagnostics Inc. 333 Fiske St., Holliston, MA 01746 United States of America www.diamonddiagnostics.com
	Telephone	+1 (508) 429-0450
	Email	support@diamonddiagnostics.com
	Distributor information	
	Distributor Headquarters	Mission Diagnostics LLC 1 Burton Dr., Meridith, NH 03246 United States of America
	Telephone	+1 (508) 429-0450
	Email	support@diamonddiagnostics.com
1.4	Emergency Telephone	
	Emergency Phone #	+1 (508) 429-0450

2. Hazards Identification

GHS- Classification

Classification Skin Irritant, Eye Irritant



2.1 Substance or mixture classification

Physical state	Liquid
Appearance	Clear/colorless
Emergency overview	Health injuries are not known or expected under normal use.

2.2 Label Elements

Signal word	None
Hazardous substances	Sodium Azide.
OSHA regulatory status	This product is not hazardous according to OSHA 29CFR 1910.1200.

2.3 Potential health effects

Routes of exposure

Skin contact. Eye contact.

Eyes

May cause eye irritation or serious eye damage.

Skin

May cause skin irritation or skin burns.

Inhalation

In high concentrations, vapors may be irritating to the upper respiratory tract leading to chemical pneumonitis and pulmonary edema.

Ingestion

If swallowed, may cause discomfort and lead to gastrointestinal tract burns.

Target organs

Eyes, lungs and skin.

Chronic effects

Repeated skin contact may cause dermatitis.

Signs and symptoms

Direct contact with skin and eyes may cause irritation.

2.4 Potential environmental effects

The product components are not classified as environmentally hazardous. However, this does not eliminate the possibility that large or frequent spills can have a harmful or damaging impact on the environment.

Hazard Statements

H315

Causes skin irritation and eye damage.

H318

Causes serious eye damage.

H335

May cause respiratory irritation

Precautionary Statements

P234

Keep in original container.

P264

Wash skin thoroughly after handling.

P273

Avoid release to the environment.

P280

Wear protective gloves/protective clothing/eye protection/face protection.

P301 + P330 + P331

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P363

Wash contaminated clothing before reuse.

P390

Absorb spillage to prevent material damage.

P391

Collect spillage.

P501

Dispose of contents/container to an approved waste disposal plant.

3. Composition/Information on ingredients

Components:

Chemical name	CAS-No.	Classification	Concentration (% w/w)
Sodium Azide	26628-22-8	Acute toxicity, Oral (Category 2), H300 Acute toxicity, Inhalation (Category 2), H330 Acute toxicity, Dermal (Category 1), H310 Specific target organ toxicity - repeated exposure, Oral (Category 2), Brain, H373 Short-term (acute) aquatic hazard (Category 1), H400 Long-term (chronic) aquatic hazard (Category 1), H410	<1.0%

4. First Aid Measures

4.1 Description of First Aid Measures

Eye Contact	In case of eye contact, immediately flush eyes with fresh water for at least 15 minutes while holding eyelids open. Remove contact lenses immediately if worn by the affected person. Pursue medical treatment if irritation persists.
Skin Contact	In case of skin contact, remove any or all of contaminated clothing, while rinsing the affected skin with large amounts of water. Pursue medical attention if irritation develops and persists.
Inhalation	In case of inhalation, move the affected person to fresh air. Call a physician if symptoms develop or persist.
Ingestion	Do NOT induce vomiting. In case of ingestion, make the affected person either drink some water or rinse out their mouth. If any other symptoms persist, contact a medical professional or a poison control center.
Notes to Physician	Provide general supportive measures and treat symptomatically.
General Advice	If you feel unwell, seek medical advice.

4.2 Most important symptoms and effects, both acute and delayed

Eye Contact	Causes serious eye damage
Skin Contact	Causes skin irritation
Inhalation	Causes corrosion of the breathing system
Ingestion	Causes corrosion of the digestion system

5. Fire-Fighting Measures

5.1 Flammable properties	This product is not flammable.
5.2 Extinguishing media	
Suitable extinguishing media	Extinguish with water spray, carbon dioxide (CO ₂), dry chemical or material appropriate for the surrounding fire.
Unsuitable extinguishing media	Do not use water jet.
5.3 Protection of firefighters	
Specific hazards arising from the chemical	Thermal decomposition may produce irritating fumes/gases.
Protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Firefighting equipment/instructions	Use standard firefighting procedures and consider the hazards of other involved materials. Avoid contaminating surface water with fire extinguishing water.
Hazardous combustion Products	Hazardous combustion gases or vapors may develop in the event of fire.

6. Accidental Release Measures

6.1 Personal precautions	Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Extinguish any sources of ignition. Avoid breathing mist, vapor, dust, fume and spray. Wash thoroughly after handling.
6.2 Environmental precautions	Avoid contamination to enter drains, sewers or watercourses.

6.3 Methods for containment and cleaning up

Do not touch damaged containers or spilled material unless wearing appropriate personal protective clothing. Stop leak if you can do it without risk. Contain and collect spillage and place in suitable container for future disposal. Dispose of in accordance with all applicable regulations (see Section 13).

6.4 Other information

Clean up in accordance with all applicable regulations.

7. Handling and Storage

7.1 Safe Handling

Use appropriate personal protective equipment (see Section 8). Use only with adequate ventilation. Avoid breathing mist/vapor/spray/dust. Do not eat, drink, smoke, or use personal products when handling chemical substances. Avoid contact with skin, eyes and clothing. Wash affected areas thoroughly after handling. Keep away from incompatible materials (See Section 10). Keep containers tightly closed when not in use.

7.2 Hygiene Measures Storage

Wash exposed skin thoroughly after handling
Store in cool, dry, well-ventilated location out of direct sunlight. Keep away from food and beverages. Protect from freezing and physical damage. Store away from heat, open flames and other sources of ignition. Keep container tightly sealed. Store away from incompatible materials (See Section 10). Store between +2°C and +8°C.

7.3 Specific use

See section 1 – Recommended Use

8. Exposure Controls / Personnel

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sodium Azide 26628-22-8	C 0.290000 mg/m ³	Not listed	Not Listed

8.1 Occupational exposure limits

No exposure limits noted for ingredient(s).

Exposure guidelines

Follow standard monitoring procedures.

Engineering controls

Provide adequate ventilation. Observe Occupational Exposure Limits and minimize the risk of inhalation of vapors. Provide easy access to water supply and eye wash facilities.

8.2 Personal protective equipment

Eye / face protection

Wear appropriate safety glasses, goggles or face shields.

Skin protection

Wear lab coat or other protective garments. Wear protective gloves. Remove any contaminated clothing promptly.

Respiratory protection

If engineering controls do not maintain airborne concentrations below the applicable workplace exposure limits, or to an acceptable level (if exposure limits have not been established), a respirator approved by recognized national standards (or equivalent) must be worn.

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice.

Other information

Do NOT eat, drink or smoke during use.

Environment Exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance

Liquid

Physical state

Liquid

Form

Liquid

Color	Clear/colorless
Odor	Odorless
Odor threshold	No data available
pH	7.0
Vapor pressure	No data available
Vapor density	No data available
Boiling point	No data available
Viscosity (mm²/s)	No data available
Melting/Freezing point	No data available
Solubility (water)	No data available
Specific gravity	1.017 g/cm ³
Flash point	No data available
Flammability limits in air, upper, % by volume	No data available
Flammability limits in air, lower, % by volume	No data available
Decomposition temperature	No data available
Auto-ignition temperature	No data available
Evaporation rate	No data available
Relative Density	No data available
Partition coefficient: (n-octanol/water)	No data available
Explosive properties	No data available
Oxidizing properties	No data available

10. Stability and Reactivity

- 10.1 Reactivity** Not reactive under recommended handling and storage conditions.
- 10.2 Chemical stability** Material is stable under normal conditions.
- 10.3 Possibility of hazardous Reactions** Hazardous reactions are not anticipated under recommended conditions of handling and storage.
- 10.4 Conditions to avoid** Extreme heat, open flames, hot surfaces, sparks, ignition sources and incompatible materials.
- 10.5 Incompatible materials** Caution, contains sodium azides, in contact with heavy metals, may form explosive metal azides.
- 10.6 Hazardous polymerization** No data available
- 10.7 Hazardous decomposition Products** Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. Toxicological Information

Information on hazard classes as defined in Regulation (EC) No 1272/2008 Acute toxicity

Assessment:	Based on available data, the classification criteria are not met.
Product data:	No data available.

Substance data:

Name	Route	Result
Sodium azide	oral	LD50 Rat: 42 mg/kg
	dermal	LD50 Rabbit: 5 mg/kg
	inhalation	LC50 Rat: >0.054 mg/L (4 hr [Dust])

Skin corrosion/irritation

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Serious eye damage/irritation

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Respiratory or skin sensitization

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Carcinogenicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

International Agency for Research on Cancer (IARC):

Name	Classification
Sodium azide	Not Applicable

Germ cell mutagenicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Reproductive Toxicity Assessment:

Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Specific target organ toxicity (single exposure) Assessment:

May cause damage to organs.

Product data: No data available.

Substance data:

Name	Result
Sodium azide	May cause damage to the brain through prolonged or repeated exposure.

Specific target organ toxicity (repeated exposure)

Assessment: Based on available data, the classification criteria are not met.
Product data: No data available.
Substance data: No data available.

Aspiration toxicity

Assessment: Based on available data, the classification criteria are not met.
Product data: No data available.
Substance data: No data available.

Information on likely routes of exposure:

No data available.

Symptoms related to the physical, chemical and toxicological characteristics:

No data available.

Information on other hazards Endocrine disrupting properties:

Substance data: No data available.
Other information: No data available.

12. Ecological Information

Toxicity
Acute (short-term) toxicity

Assessment: Based on available data, the classification criteria are not met.
Product data: No data available.
Substance data:

Name	Result
Sodium azide	Fish LC50 Gasterosteus aculeatus: 0.8 mg/L (96 hr)
	Aquatic Plants EC50 Pseudokirchneriella subcapitata: 0.35 mg/L (96 hr [cell number])

Chronic (long-term) toxicity

Assessment: Based on available data, the classification criteria are not met
Product data: No data available.
Substance data: No data available.
Persistence and degradability Product data:
 No data available.

Substance data:

Name	Result
Sodium azide	Biodegradation studies do not apply to inorganic substances.

Bioaccumulative potential

Product data: No data available.
Substance data: No data available

Mobility in soil

Product data: No data available.

Substance data: No data available.

Results of PBT and vPvB assessment **Product data:**

PBT assessment: This product does not contain any substances that are assessed to be a PBT.

vPvB assessment: This product does not contain any substances that are assessed to be a vPvB.

Substance data:

PBT assessment:

Sodium azide	PBT assessment does not apply to inorganic substance.
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vPvB assessment:

Sodium azide	vPvB assessment does not apply to inorganic substances
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Endocrine disrupting properties

Substance data: No data available.

Other adverse effects: No data available.

Hazard to the ozone layer

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

13. Disposal Considerations

13.1 Disposal methods

Disposal instructions Contaminated instruments and surfaces should be disinfected in accordance with your employer's chemical-specific and universal/standard precautions.

Waste from residues / unused products

Dispose in accordance with all applicable local and national regulations. Avoid releasing unused products into drainage systems and/or into the environment.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport Information

DOT Not regulated as a hazardous material by DOT.

DOR Not regulated as dangerous goods.

IATA Not regulated as dangerous goods.

IMDG Not regulated as dangerous goods.

TDG Not regulated as dangerous goods.

15. Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture. European regulations

Inventory listing (EINECS): All ingredients are listed or exempt. **REACH**

SVHC candidate list: None of the ingredients are listed. **REACH SVHC**

Authorizations: None of the ingredients are listed.

REACH Restriction: None of the ingredients are listed.

Water hazard class (WGK) (Product): Not determined.

Water hazard class (WGK) (Substance):

Ingredient Name	CAS	Class
Sodium azide	26628-22-8	Water hazard class 2: obviously hazardous to water

Additional information: Not determined.

Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

16. Other Information

Recommended restrictions Use in accordance with supplier's recommendations.

Further information HMIS® is a registered trade and service mark of the NPCA.

HMIS® ratings

Health: 0
 Flammability: 0
 Physical hazard: 0

NFPA ratings

Health: 0
 Flammability: 0
 Instability: 0

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