



# Safety Data Sheet

## Section 1: Product and Company Identification

### 1.1 Product Identifiers:

**Product Name:** AbraMag Genomic DNA Magnetic Purification Kit

**Product Code:** 555020 (100T), 555045 (960T)

**1.2 Identified Use:** Isolation of genomic DNA from samples. **Restrictions on Use:** For research use only.

**1.3 Company:** Gold Standard Diagnostics, 124 Railroad Drive, Warminster, PA 18974 USA, info.abraxis@us.goldstandarddiagnostics.com

+1(215) 357-3911, FAX +1(215) 357-5232

**1.4 Emergency Telephone Number:** +1(215) 357-3911

## Section 2: Hazard(s) Identification

### 2.1 Classification of the mixture:

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute toxicity, Oral (Category 4), H302 Harmful if swallowed

Acute toxicity, Inhalation (Category 4), H332 Harmful if inhaled

Skin irritation (Category 2), H315 Causes skin irritation

Eye irritation (Category 2A), H319 Causes serious eye irritation

HMIS Rating: Health hazard: 2, Chronic Health Hazard: \*, Flammability: 0, Physical Hazard 0

NFPA Rating: Health hazard: 2, Fire Hazard: 0, Reactivity Hazard: 0

### 2.2 GHS Label elements, including precautionary statements:

Pictogram(s)



Signal word: Warning

Hazard statement(s):

H300 Fatal if swallowed.

H302 + H332 Harmful if swallowed or if inhaled.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statement(s):

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink, or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear eye protection/face protection.

P280 Wear protective gloves.

P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if easy to do. Continue rinsing.

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 and wash before reuse.

P501 Dispose of contents/container to an approved waste disposal plant.

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS:** None known.

**2.4 Unknown acute toxicity:** None known.

## Section 3: Composition / Information on Ingredients

**3.2 Mixtures:** Mixture of the hazardous substance(s) listed below, with nonhazardous additions.

Hazardous component(s):

Name and Synonym(s): Guanidine hydrochloride, Guanidinium chloride, Aminofornamidine hydrochloride, Aminomethanamidine hydrochloride

Formula: CH<sub>5</sub>N<sub>3</sub> · HCl

Molecular weight: 95.53 g/mol

CAS No.: 50-01-1

EC-No.: 200-002-3

Classification: Acute Toxicity 4; Skin Irritation 2; Eye Irritation 2A; H302 + H332, H315, H319

Percentage in Mixture: 5 - 13 %

Name and Synonym(s): Sodium azide  
Formula: N3Na Molecular weight: 65.01 g/mol CAS No.: 26628-22-8 EINECS No.: 247-852-1  
Classification: Acute Toxicity Oral 2; Aquatic Acute 1, Aquatic Long-term 1 H300; H400; H410  
Percentage in Mixture: < 0.1%  
For full text of H-Statements mentioned in this Section, see Section 2.

#### Section 4: First Aid Measures

**4.1 Description of first aid measures:** Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

**If inhaled:** 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.

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

**4.2 Most important symptoms and effects, both acute and delayed:** The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed:** No data available. Treat symptomatically.

#### Section 5: Fire-fighting Measures

**5.1 Suitable extinguishing media:** Water spray, alcohol-resistant foam, dry chemical or carbon dioxide

**5.2 Special hazards arising from the substance or mixture:** Carbon oxides, Nitrogen oxides (NOx), Hydrogen chloride gas

**5.3 Advice for firefighters:** Wear self-contained breathing apparatus for fire-fighting if necessary.

**5.4 Further information:** No data available

#### Section 6: Accidental Release Measures

**6.1 Personal precautions, protective equipment and emergency procedures:** Use personal protective equipment (see section 8). Avoid dust formation. Avoid breathing vapors, mist, dust, or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

**6.2 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.

**6.3 Methods and materials for containment and cleaning up:** Contain spillage. Solids (if applicable): Pick up and arrange disposal without creating dust. Sweep up and shovel. Liquids (if applicable): Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

**6.4 Reference to other sections:** For information on safe handling see section 7.

For information on personal protection see section 8.

For information on disposal see section 13.

#### Section 7: Handling and Storage

**7.1 Precautions for safe handling:** See section 2. Avoid formation of dust and aerosols. Avoid inhalation of vapors or mist, and avoid contact with skin and eyes. Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs. Wear appropriate personal protective equipment. Do not eat, drink, or smoke in work area.

**7.2 Precautions for safe storage:** Keep container(s) tightly closed in a dry, well-ventilated place. Protect from physical damage. Opened containers must be carefully resealed and kept upright to prevent leakage. See label or product insert for appropriate storage temperature and additional specific information. Storage class (TRGS 510): Non Combustible Liquids.

**7.3 Specific end use(s):** Other than use(s) specified in section 1, no other uses are stipulated.

#### Section 8: Exposure Controls / Personal Protection

##### 8.1 Control parameters:

##### Component(s) with workplace control parameters

US OSHA None established

ACGIH

Sodium Azide 0.29 mg/m<sup>3</sup> Ceiling (as NaN<sub>3</sub>); 0.11 ppm Ceiling (as Hydrazoic acid) (vapor)CAS # 26628-22-8

DFG MAK

Sodium Azide 0.4 mg/m<sup>3</sup> Peak (inhalable fraction); 0.2 mg/m<sup>3</sup> TWA MAK (inhalable fraction)CAS # 26628-22-8

Ireland

Sodium Azide 0.1 mg/m<sup>3</sup> TWA (as NaN<sub>3</sub>); 0.3 mg/m<sup>3</sup> STEL (as NaN<sub>3</sub>); Potential for cutaneous absorption CAS # 26628-22-8

IOELVs

Sodium Azide Possibility of significant uptake through the skin; 0.1mg/m<sup>3</sup> TWA; 0.3mg/m<sup>3</sup> STELCAS # 26628-22-8

NOISH	None established
Japan	None established

## 8.2 Exposure controls:

**Appropriate engineering controls:** Provide adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. Keep away from food and beverages.

### Personal protective equipment

**Eye protection:** Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

**Skin protection:** Handle with chemical resistant 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.

**Respiratory protection:** Where risk assessment shows air-purifying respirators are appropriate, use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Body protection:** Lightweight, protective clothing to prevent skin exposure. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

## Section 9: Physical and Chemical Properties

### 9.1 Information on basic physical and chemical properties of mixture

**Appearance:** Multiple

**Odor:** Characteristic

**Odor Threshold:** No data available

**pH:** Multiple

**Melting point/freezing point:** No data available

**Initial boiling point and boiling range:** No data available

**Flash point:** No data available

**Evaporation rate:** No data available

**Flammability (solid, gas):** No data available

**Upper/lower flammability or explosive limits:** No data available

**Vapor pressure:** No data available

**Vapor density:** No data available

**Relative density:** No data available

**Water solubility:** Various

**Partition coefficient: n-octanol/water:** No data available

**Auto-ignition temperature:** No data available

**Decomposition temperature:** No data available

**Viscosity:** No data available

**Explosive properties:** No data available

**Oxidizing properties:** No data available

**9.2 Other information:** No data available

## Section 10: Stability and Reactivity

**10.1 Reactivity:** No data available

**10.2 Chemical stability:** Stable under recommended storage conditions. Guanidinium chloride is hygroscopic.

**10.3 Possibility of hazardous reactions:** Hydrogen chloride gas, Nitrogen oxides (NO<sub>x</sub>), Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>).

**10.4 Conditions to avoid:** Keep away from open flame, hot surfaces, heat sources, and sources of ignition.

**10.5 Incompatible materials:** Strong oxidizing agents, Strong acids, Organic materials. Buffers containing guanidinium chloride should not be mixed with cleaning solutions containing bleach. Liquid waste from extraction and isolation procedures containing guanidinium chloride must not be mixed with other laboratory waste. This will prevent potentially harmful chemical reactions from occurring.

**10.6 Hazardous decomposition products:** No data available. In the event of fire: see section 5.

## Section 11: Toxicological Information

### 11.1 Information on toxicological effects

To the best of our knowledge, the chemical, physical, and toxicological properties of this product have not been thoroughly investigated.

Sodium azide is known to be highly toxic.

Sodium azide Oral LD50 Rat 27 mg/kg; Dermal LD50 Rat 50mg/kg; Dermal LD50 Rabbit 20 mg/kg CAS # 26628-22-8

**Inhalation:** No data available **Ingestion:** No data available

**Skin contact:** Irritant to skin and mucous membranes.

**Eye contact:** May cause eye irritation in susceptible persons.

**Respiratory or skin sensitization:** No data available

**Aspiration hazard:** No data available

**Mutagenicity:** No data available

### Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed humancarcinogen 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.

**Teratogenicity:** No data available                      **Reproductive/fertility toxicity:** No data available

**Specific target organ toxicity, single exposure:** No data available

**Specific target organ toxicity, repeated exposure:** No data available

## Section 12: Ecological Information

### 12.1 Toxicity:

Fresh Water Species

Sodium azide                      96 h LC50 Oncorhynchus mykiss: 0.8 mg/L; 96 h LC50 Lepomis macrochirus: 0.7 mg/L; 96 h LC50 Pimephales

promelas: CAS # 26628-22-8      5.46 mg/L

Microtox                              No information available

Water Flea                              No information

available Fresh Water Algae      No

information available

**12.2 Persistence and degradability:** No data available

**12.3 Bioaccumulative potential:** No data available

**12.4 Mobility in soil:** No data available

**12.5 Results of PBT and vPvB assessment:** No data available

**12.6 Other adverse effects:** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

## Section 13: Disposal Considerations

### 13.1 Waste treatment methods

**Product:** Chemical residues and remains should be routinely handled as special waste. This must be disposed of in compliance with anti-pollution and other laws of the country concerned. To ensure compliance we recommend contact of the relevant authorities. Sodium azide preservative may form explosive compounds in metal drain lines.

**Contaminated packaging:** All waste must be handled and disposed according to local, state, and federal regulations. Refer to sections 7 and 8 for safe handling guidance.

## Section 14: Transport Information

DOT, IMDG, IATA: Not dangerous goods.

## Section 15: Regulatory Information

### US Federal and State Regulations

SARA 313	Sodium azide is subject to reporting requirements of section 313, title III of SARA. 1.0% de minimis concentration
CERCLA RG's, 40 CFR 302.4	Sodium azide is listed
CA Prop 65	No ingredients listed
MA MSL	Sodium azide is listed
NJ Dept. Health RTK List	Sodium azide is listed
PA RTK	Sodium azide is listed

### EU Regulations

This SDS complies with EC Regulations 1907/2006 (REACH) and amendments

Water Hazard Class (Germany)      WGK 1, low water endangering

REACH 1907/2006 EC – Annex XIV – List of substances subject to authorization – No ingredients

listed According to EC Directives (1999/45/EC and 67/548 EEC) – No ingredients listed

Not classified as dangerous per EC Directives (1999/45/EC and 67/548 EEC)

### Canada

This product does not meet WHMIS criteria for hazardous materials

PIN                                      N/A

Ingredients on Ingredients Disclosure List

Sodium azide

Ingredients with unknown toxicological properties

None

## Section 16: Other information

This information is based on our present knowledge. While Gold Standard Diagnostics believes that the data contained herein are factual and the opinions expressed represent a best effort to present accurate information, the data are not to be taken as a warranty or representation for which Gold Standard Diagnostics assumes legal responsibility. The information shall not be taken as being all-inclusive and is to be used only as a guide. The data are offered solely for the user's consideration, investigation, and verification. These suggestions should not be confused with either state, municipal, or insurance requirements, or with national safety codes and constitute no warranty. Any use of these data and information must be determined by the user to be in accordance with applicable federal, state, and local regulations.

All materials and mixtures may present unknown hazards and should be used with caution. Since Gold Standard Diagnostics cannot control the methods, volumes, or conditions of use of this product, Gold Standard Diagnostics shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. An individual technically qualified to handle potentially hazardous chemicals must supervise the use of this material. This product is sold for research use only. It is not for any human or animal therapeutic or clinical diagnostic use.

**Date this SDS is effective:** 11APR2022

**Version:** 3