

SECTION 1: Identification

1.1. Identification

Product form : Article
 Product name : PrepQuant™ cfDNA ECQ 8000 Kit
 Product code : 1100000

1.2. Recommended use and restrictions on use

Recommended use : Laboratory chemicals
 Restrictions on use : None known

1.3. Supplier

Invivoscribe Inc.
 10222 Barnes Canyon Rd., Bldg. 1
 San Diego, CA, 92121
 T 1-858-224-6600
customerservice@invivoscribe.com

1.4. Emergency telephone number

Emergency number : 24 Hr. Emergency: VELOCITYEHS: 1-800-704-9215 (Contract #MIS9930321) US, Canada, Puerto Rico, and the U.S. Virgin Islands. VelocityEHS: +1 -360-256-7365 (Global) Collect calls accepted.

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Serious eye damage/eye irritation, Category 2 H319 Causes serious eye irritation.
 Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) : Warning
 Hazard statements (GHS US) : H319 - Causes serious eye irritation
 Precautionary statements (GHS US) : P264 - Wash hands, forearms and face thoroughly after handling.
 P280 - Wear protective gloves, protective clothing, eye protection, face protection, and hearing protection.
 P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P337+P313 - If eye irritation persists: Get medical advice or attention.

2.3. Other hazards which do not result in classification

No additional information available

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according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
Guanidine, hydrochloride (1:1)	CAS-No.: 50-01-1	8.33	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319
Isopropyl alcohol	CAS-No.: 67-63-0	6.57	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general	: If you feel unwell, seek medical advice.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation	: None under normal conditions.
Symptoms/effects after skin contact	: None under normal conditions.
Symptoms/effects after eye contact	: Eye irritation.
Symptoms/effects after ingestion	: None under normal conditions.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media	: Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard	: No fire hazard.
Explosion hazard	: No direct explosion hazard.
Hazardous decomposition products in case of fire	: Toxic fumes may be released.

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5.3. Special protective equipment and precautions for fire-fighters

- Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.
- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material-damage.

6.1.1. For non-emergency personnel

- Protective equipment : Wear recommended personal protective equipment.
- Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes.

6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
- Emergency procedures : Evacuate unnecessary personnel. Stop leak if safe to do so.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

- For containment : Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak, if possible without risk.
- Methods for cleaning up : Take up liquid spill into absorbent material.
- Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Additional hazards when processed : Not expected to present a significant hazard under anticipated conditions of normal use.
- Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment.
- Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Keep in a cool, well-ventilated place away from heat.
- Storage conditions : Keep cool. Protect from sunlight.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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No additional information available	
1,2,3-Propanetriol (56-81-5)	
No additional information available	
USA - OSHA - Occupational Exposure Limits	
OSHA PEL TWA	15 mg/m ³ (mist, total particulate) 5 mg/m ³ (mist, respirable fraction)
Ethyl alcohol (64-17-5)	
No additional information available	
USA - ACGIH - Occupational Exposure Limits	
ACGIH® TLV® STEL	1000 ppm
ACGIH chemical category	Confirmed Animal Carcinogen with Unknown Relevance to Humans
USA - OSHA - Occupational Exposure Limits	
OSHA PEL TWA	1900 mg/m ³ 1000 ppm
USA - IDLH - Occupational Exposure Limits	
IDLH	3300 ppm (10% LEL)
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL (TWA)	1900 mg/m ³ 1000 ppm
Isopropyl alcohol (67-63-0)	
No additional information available	
USA - ACGIH - Occupational Exposure Limits	
ACGIH® TLV® TWA	200 ppm
ACGIH® TLV® STEL	400 ppm
ACGIH chemical category	Not Classifiable as a Human Carcinogen
USA - ACGIH - Biological Exposure Indices	
BEI (BLV)	40 mg/l Parameter: Acetone - Medium: urine - Sampling time: end of shift at end of workweek (background, nonspecific)
USA - OSHA - Occupational Exposure Limits	
OSHA PEL TWA	980 mg/m ³ 400 ppm
USA - IDLH - Occupational Exposure Limits	
IDLH	2000 ppm (10% LEL)
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL (TWA)	980 mg/m ³ 400 ppm
NIOSH REL (STEL)	1225 mg/m ³ 500 ppm

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Sodium chloride (7647-14-5)

No additional information available

Water (7732-18-5)

No additional information available

Polyoxyethylene sorbitan monolaurate (9005-64-5)

No additional information available

Guanidine, hydrochloride (1:1) (50-01-1)

No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Wear recommended personal protective equipment.

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Color	: Colorless
Odor	: Odorless
Odor threshold	: No data available
pH	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability	: Not applicable.

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Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified.
Acute toxicity (dermal)	: Not classified.
Acute toxicity (inhalation)	: Not classified.

Isopropyl alcohol (67-63-0)

LD50 oral rat	4710 - 5840 mg/kg (Source: OECD_SIDS)
LD50 dermal rabbit	4059 mg/kg (Source: JAPAN_GHS)
LC50 Inhalation - Rat [ppm]	> 10000 ppm (Exposure time: 6 h Source: ECHA_API)

Guanidine, hydrochloride (1:1) (50-01-1)

LD50 oral rat	907.1 mg/kg (Source: ECHA)
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Guanidine, hydrochloride (1:1) (50-01-1)	
LD50 dermal rabbit	> 2000 mg/kg (Source: ECHA_API)
LC50 Inhalation - Rat	7.655 mg/l/4h
ATE US (oral)	907.1 mg/kg body weight
ATE US (vapors)	7.655 mg/l/4h
ATE US (dust, mist)	7.655 mg/l/4h

Skin corrosion/irritation	: Not classified.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitization	: Not classified.
Germ cell mutagenicity	: Not classified.
Carcinogenicity	: Not classified.

Isopropyl alcohol (67-63-0)	
IARC group	3 - Not classifiable

Reproductive toxicity	: Not classified.
STOT-single exposure	: Not classified.

Isopropyl alcohol (67-63-0)	
STOT-single exposure	May cause drowsiness or dizziness.

STOT-repeated exposure	: Not classified.
Aspiration hazard	: Not classified.
Viscosity, kinematic	: No data available
Symptoms/effects after inhalation	: None under normal conditions.
Symptoms/effects after skin contact	: None under normal conditions.
Symptoms/effects after eye contact	: Eye irritation.
Symptoms/effects after ingestion	: None under normal conditions.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.
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Isopropyl alcohol (67-63-0)	
LC50 - Fish [1]	9640 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through] Source: IUCLID)
EC50 - Crustacea [1]	13299 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 - Fish [2]	11130 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static] Source: IUCLID)

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

Isopropyl alcohol (67-63-0)	
Partition coefficient n-octanol/water (Log Pow)	0.05 (at 25 °C)

Guanidine, hydrochloride (1:1) (50-01-1)	
Partition coefficient n-octanol/water (Log Pow)	< -1.7 (at 20 °C (at pH 7.4))

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12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Regional waste regulation	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Disposal must be done according to official regulations.
Additional information	: Do not re-use empty containers.

SECTION 14: Transport information

In accordance with DOT / IMDG / IATA

14.1. UN number

Not regulated for transport

14.2. UN proper shipping name

Proper Shipping Name (DOT)	: Not applicable
Proper Shipping Name (TDG)	: Not applicable
Proper Shipping Name (IMDG)	: Not applicable
Proper Shipping Name (IATA)	: Not applicable

14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT) : Not applicable

IMDG

Transport hazard class(es) (IMDG) : Not applicable

IATA

Transport hazard class(es) (IATA) : Not applicable

14.4. Packing group

Packing group (DOT)	: Not applicable
Packing group (IMDG)	: Not applicable
Packing group (IATA)	: Not applicable

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

DOT

No data available

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IMDG

No data available

IATA

No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

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SARA Section 311/312 Hazard Classes	Health hazard - Serious eye damage or eye irritation
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All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

Isopropyl alcohol	CAS-No. 67-63-0	6.57%
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15.2. International regulations


Isopropyl alcohol (67-63-0)

Listed on Thailand Existing Chemicals Inventory (DIW)

Guanidine, hydrochloride (1:1) (50-01-1)

Listed on Thailand Existing Chemicals Inventory (DIW)

15.3. US State regulations

 **WARNING:** This product can expose you to Ethyl alcohol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Component	State or local regulations
Isopropyl alcohol(67-63-0)	U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List; U.S. - Massachusetts - Right To Know List; U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

SECTION 16: Other information

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Full text of hazard classes and H-statements

H225	Highly flammable liquid and vapor
H302	Harmful if swallowed
H315	Causes skin irritation

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Full text of hazard classes and H-statements	
H319	Causes serious eye irritation
H336	May cause drowsiness or dizziness

Safety Data Sheet (SDS), USA - HSI

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