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A Geno Technology, Inc. (USA) brand name

# Safety Data Sheet

## Pearl™ IgG Purification Kit

Cat. # 786-799



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# Pearl IgG Purification Resin

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations  
Issue date: 4/30/2013 Revision date: 12/22/2025 Supersedes: 11/20/2025 Version: 12.0

### SECTION 1 Identification

#### 1.1. Product identifier

Product form : Mixture  
Product name : Pearl IgG Purification Resin  
Product code : 063I

#### 1.2. Other means of identification

No additional information available

#### 1.3. Recommended use of the chemical and restrictions on use

Use of the substance/mixture : Research and development

#### 1.4. Supplier's details

G-Biosciences/ Geno Technology, Inc.  
9800 Page Avenue  
St. Louis, MO 63132-1429, USA  
Tel.1-800-628-7730  
[www.GBiosciences.com](http://www.GBiosciences.com)

#### 1.5. Emergency phone number

Emergency number : Chemtrec **1-800-424-9300** (USA/Canada), **+1-703-527-3887** (Intl)

### SECTION 2 Hazard identification

#### 2.1. Classification of the substance or mixture

##### GHS-US classification

Flammable liquid, Category 2	H225	Highly flammable liquid and vapour.
Carcinogenicity, Category 1A	H350	May cause cancer.

Full text of H-statements: see section 16

#### 2.2. Label elements

##### GHS US labelling

Hazard pictograms (GHS US) :



Signal word (GHS US) :

Danger

Hazard statements (GHS US) :

H225 - Highly flammable liquid and vapour  
H350 - May cause cancer.

Precautionary statements (GHS US) :

P201 - Obtain special instructions before use.  
P202 - Do not handle until all safety precautions have been read and understood.  
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P233 - Keep container tightly closed.  
P240 - Ground/Bond container and receiving equipment.  
P241 - Use explosion-proof equipment.  
P242 - Use non-sparking tools.  
P243 - Take action to prevent static discharges.  
P280 - Wear protective gloves, protective clothing, eye protection, face protection, and hearing

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protection.

P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P308+P313 - If exposed or concerned: Get medical advice/attention.

P370+P378 - In case of fire: Use appropriate media to extinguish.

P403+P235 - Store in a well-ventilated place. Keep cool.

P405 - Store locked up.

P501 - Dispose of contents and/or container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.

### 2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

### 2.4. Hazards not otherwise classified

No additional information available

### 2.5. Unknown acute toxicity

No additional information available

## SECTION 3 Composition/information on ingredients

### 3.1. Substances

Not applicable

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### 3.2. Mixtures

Name	Common Name (Synonyms)	Product identifier	%	GHS-US classification
ethanol	1-hydroxyethane / absolute alcohol / absolute ethanol / alcohol / alcohol 200 proof / alcohol C2 / alcohol, absolute / alcohol, anhydrous / alcohol, dehydrated / algrain / anhydrol / anydrol / APEXA / bioethanol / BIO-Fire / cologne spirit / cologne spirits / ECO-Fire / ethanol / ethanol 200 proof / ethanol, absolute / ethicap / ethyl alcohol / ethyl alcohol, anhydrous / ethyl hydrate / ethyl hydroxide / ethylic alcohol / fermentation alcohol / grain alcohol / hydrated oxide of ethyl / IMS grades (=ethanol) / industrial alcohol / jaysol / jaysol S / methyl carbinol / methylated spirit (=ethanol) / molasses alcohol / neutral spirits / potable spirits / potato alcohol / proof spirits / rectified spiritus / SD alcohol 23-hydrogen / silent spirit / spirit / spirit of wine / spirits of wine / tecsol / Tecsol C	CAS-No.: 64-17-5	10 – 50	Flam. Liq. 2, H225 Carc. 1A, H350

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

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### SECTION 4 First-aid measures

#### 4.1. Description of necessary first-aid measures

First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible). IF exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Allow affected person to breathe fresh air. Allow the victim to rest.
First-aid measures after skin contact	: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Rinse skin with water/shower. Take off immediately all contaminated clothing.
First-aid measures after eye contact	: Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists. Rinse eyes with water as a precaution.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a poison center or a doctor if you feel unwell.
Self protection of the first-aiders	: First aid workers will be equipped with suitable personal protective equipment.

#### 4.2. Most important symptoms/effects, acute and delayed

Potential adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.
Symptoms/effects	: Not expected to present a significant hazard under anticipated conditions of normal use.
Symptoms/effects after inhalation	: None under normal conditions.
Symptoms/effects after skin contact	: None under normal conditions.
Symptoms/effects after eye contact	: None under normal conditions.
Symptoms/effects after ingestion	: None under normal conditions.

#### 4.3. Indication of immediate medical attention and special treatment needed, if necessary

Other medical advice or treatment	: Treat symptomatically.
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### SECTION 5: Fire-fighting measures

#### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Sand. 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	: Highly flammable liquid and vapour.
Explosion hazard	: No direct explosion hazard.
Hazardous decomposition products in case of fire	: Toxic fumes may be released.

#### 5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment. Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection. 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.
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### For non-emergency personnel

- Protective equipment : Wear recommended personal protective equipment.
- Emergency procedures : Evacuate unnecessary personnel. No open flames, no sparks, and no smoking. Only qualified personnel equipped with suitable protective equipment may intervene.

### For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal protection".
- Emergency procedures : Ventilate area. Evacuate unnecessary personnel. Stop leak if safe to do so.
- Environmental precautions : Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Notify authorities if product enters sewers or public waters.

## 6.2. Methods and materials 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 without risks if possible.
- Methods for cleaning up : Take up liquid spill into absorbent material. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials. Notify authorities if product enters sewers or public waters.
- Other information : Dispose of materials or solid residues at an authorized site.

See Section 8. Exposure controls and personal protection. For further information refer to section 13.

## SECTION 7 Handling and storage

### 7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Limit quantities of product at the minimum necessary for handling and limit the number of exposed workers. Provide local exhaust or general room ventilation. Floors, walls and other surfaces in the hazard area must be cleaned regularly.
- Hygiene measures : Separate working clothes from town clothes. Launder separately. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
- Additional hazards when processed : Not expected to present a significant hazard under anticipated conditions of normal use.

### 7.2. Conditions for safe storage, including incompatibilities

- Technical measures : Ground/bond container and receiving equipment.
- Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use. Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.
- Incompatible products : Strong bases. Strong acids.
- Incompatible materials : Sources of ignition. Direct sunlight.
- Storage temperature : 4 °C
- Packaging materials : Always store product in container of same material as original container.

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### SECTION 8 Exposure controls/personal protection

#### 8.1. Control parameters

##### ethanol (64-17-5)

##### USA - ACGIH® - Threshold Limit Values

ACGIH® TLV® STEL	1000 ppm
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##### USA - Cal/OSHA - Occupational Exposure Limits

Local name	Ethyl alcohol; ethanol
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Cal/OSHA PEL (OEL TWA)	1900 mg/m <sup>3</sup>
	1000 ppm

Regulatory reference	California Division of Occupational Safety and Health (Cal/OSHA) - Permissible Exposure Limit for Chemical Contaminants (Table AC-1)
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##### USA - NIOSH - Occupational Exposure Limits

Local name	Ethyl alcohol (Ethanol)
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NIOSH REL 10h TWA	1000 ppm
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Regulatory reference (US-NIOSH)	OSHA Annotated Table Z-1 (NIOSH Pocket Guide to Chemical Hazards (NPG))
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#### 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, such as personal protective equipment

##### Personal protective equipment:

Avoid all unnecessary exposure.

##### Hand protection:

Protective gloves. Wear protective gloves.

##### Eye protection:

Chemical goggles or safety glasses. Safety glasses

##### Skin and body protection:

Wear suitable protective clothing

##### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. Wear appropriate mask. [In case of inadequate ventilation] wear respiratory protection.

##### Personal protective equipment symbol(s):



##### Other information:

Do not eat, drink or smoke during use.

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### SECTION 9 Physical and chemical properties

#### 9.1. Basic physical and chemical properties

Physical state	: Liquid
Appearance	: suspension.
Colour	: White to off-white
Odour	: Alcohol odour
Odour threshold	: No data available
pH	: 6.6
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Flammability (solid, gas)	: Not applicable. Non flammable.
Vapour pressure	: No data available
Relative vapour 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
Explosive limits	: No data available
Particle characteristics	: No data available

#### 9.2. Data relevant with regard to physical hazard classes (supplemental)

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. Highly flammable liquid and vapour.

#### 10.2. Chemical stability

Stable under normal conditions. Not established.

#### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use. Not established.

#### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7). Direct sunlight. Extremely high or low temperatures. Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

#### 10.5. Incompatible materials

Strong acids. Strong bases.

#### 10.6. Hazardous decomposition products

Hazardous decomposition products. fume. Carbon monoxide. Carbon dioxide.

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### 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

ethanol (64-17-5)	
LD50 oral rat	10470 mg/kg bodyweight (OECD 401: Acute Oral Toxicity, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 oral	8300 mg/kg bodyweight Animal: mouse
LD50 dermal rabbit	> 15800 mg/kg bodyweight (Rabbit, Experimental value, Dermal)
LC50 Inhalation - Rat	124.7 mg/l air (Equivalent or similar to OECD 403, 4 h, Rat, Male / female, Experimental value, Inhalation (vapours), 14 day(s))
LC50 Inhalation - Rat (Vapours)	116.9 mg/l Source: ECHA
ATE US (oral)	10470 mg/kg bodyweight
ATE US (vapours)	116.9 mg/l/4h
ATE US (dust,mist)	124.7 mg/l/4h

Skin corrosion/irritation : Not classified  
pH: 6.6

ethanol (64-17-5)	
pH	7 (789 g/l, 20 °C)

Serious eye damage/irritation : Not classified  
pH: 6.6

ethanol (64-17-5)	
pH	7 (789 g/l, 20 °C)

Respiratory or skin sensitisation : Not classified  
Germ cell mutagenicity : Not classified  
Carcinogenicity : May cause cancer.

ethanol (64-17-5)	
IARC group	1 - Carcinogenic to humans

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

ethanol (64-17-5)	
LOAEL (oral, rat, 90 days)	3200 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEL (oral, rat, 90 days)	1730 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents), Remarks on results: other:
NOAEL (subchronic, oral, animal/male, 90 days)	< 9700 mg/kg bodyweight Animal: mouse, Animal sex: male, Guideline: EPA OPPTS 870.3100 (90-Day Oral Toxicity in Rodents)
NOAEL (subchronic, oral, animal/female, 90 days)	> 9400 mg/kg bodyweight Animal: mouse, Animal sex: female, Guideline: EPA OPPTS 870.3100 (90-Day Oral Toxicity in Rodents)

Aspiration hazard : Not classified

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### ethanol (64-17-5)

Viscosity, kinematic	1.6 mm <sup>2</sup> /s (20 °C)
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Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

Symptoms/effects : Not expected to present a significant hazard under anticipated conditions of normal use.

Symptoms/effects after inhalation : None under normal conditions.

Symptoms/effects after skin contact : None under normal conditions.

Symptoms/effects after eye contact : None under normal conditions.

Symptoms/effects after ingestion : None under normal conditions.

## SECTION 12 Ecological information

### 12.1. Ecotoxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Not classified

### ethanol (64-17-5)

LC50 - Fish [1]	15300 mg/l (US EPA, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value, Lethal)
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EC50 - Crustacea [1]	9300 mg/l (48 h, Daphnia magna, Pure substance)
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EC50 72h - Algae [1]	275 mg/l (Equivalent or similar to OECD 201, Chlorella vulgaris, Static system, Fresh water, Experimental value, Growth rate)
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EC50 96h - Algae [1]	≈ 22000 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
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ErC50 algae	275 mg/l Source: ECHA
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NOEC (chronic)	9.6 mg/l Test organisms (species): Daphnia magna Duration: '9 d'
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### 12.2. Persistence and degradability

#### Pearl IgG Purification Resin

Persistence and degradability	Not established.
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### ethanol (64-17-5)

Persistence and degradability	Not established.
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Biochemical oxygen demand (BOD)	0.8 – 0.967 g O <sub>2</sub> /g substance
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Chemical oxygen demand (COD)	1.7 g O <sub>2</sub> /g substance
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ThOD	2.1 g O <sub>2</sub> /g substance
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BOD (% of ThOD)	0.43
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### 12.3. Bioaccumulative potential

#### Pearl IgG Purification Resin

Bioaccumulative potential	Not established.
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ethanol (64-17-5)	
Partition coefficient n-octanol/water (Log Pow)	-0.35 (Experimental value, Equivalent or similar to OECD 107, 24 °C)
Bioaccumulative potential	Not established.

### 12.4. Mobility in soil

ethanol (64-17-5)	
Surface tension	22.31 mN/m (20 °C, 100 %)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.2 (log Koc, Experimental value)
Ecology - soil	Highly mobile in soil.

### 12.5. Other adverse effects

Ozone	: Not classified
Fluorinated greenhouse gases	: No
Other information	: Avoid release to the environment.

## SECTION 13 Disposal considerations

Regional waste regulation	: Disposal must be done according to official regulations.
Waste treatment methods	: Waste treatment methods.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations. Disposal must be done according to official regulations.
Additional information	: Flammable vapours may accumulate in the container. Do not re-use empty containers.
Ecological waste information	: Avoid release to the environment.

## SECTION 14 Transport information

In accordance with DOT / TDG / IATA

### 14.1. UN Number

Not regulated for transport

### 14.2. UN Proper Shipping Name

Proper Shipping Name (DOT)	: Not regulated
Proper Shipping Name (TDG)	: Not regulated
Proper Shipping Name (IATA)	: Not regulated

### 14.3. Transport hazard class(es)

**DOT**  
Transport hazard class(es) (DOT) : Not regulated

**TDG**  
Transport hazard class(es) (TDG) : Not regulated

**IATA**  
Transport hazard class(es) (IATA) : Not regulated

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### 14.4. Packing group

Packing group (DOT) : Not regulated  
Packing group (TDG) : Not regulated  
Packing group (IATA) : Not regulated

### 14.5. Environmental hazards

Other information : No supplementary information available.

### 14.6. Transport in bulk

Not applicable

### 14.7. Special precautions for user

**DOT**  
Not regulated

**TDG**  
Not regulated

**IATA**  
Not regulated

## SECTION 15 Regulatory information

### 15.1. Federal regulations

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

Name	CAS-No.	Listing	Commercial status	Flags
ethanol	64-17-5	Present	Active	

### 15.2. International regulations

#### CANADA

#### ethanol (64-17-5)

Listed on the Canadian DSL (Domestic Substances List)

#### EU-Regulations

No additional information available

#### National regulations

#### ethanol (64-17-5)

Listed on IARC (International Agency for Research on Cancer)  
Listed on INSQ (Mexican National Inventory of Chemical Substances)

### 15.3. State regulations

No additional information available

## SECTION 16 Other Information

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Other information : None.

Full text of hazard classes and H-statements	
H225	Highly flammable liquid and vapour
H350	May cause cancer.

Abbreviations and acronyms	
ACGIH	American Conference of Governmental Industrial Hygienists
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
CAS-No.	Chemical Abstracts Service number
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
COD	Chemical oxygen demand (COD)
CSA	Chemical safety assessment
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
ED	Endocrine disruptor
EN	European Standard
EWC	European waste catalogue
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
Log Kow	Partition coefficient n-octanol/water (Log Kow)
Log Pow	Partition coefficient n-octanol/water (Log Pow)
MAK	maximum workplace concentration
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
N.O.S.	Not Otherwise Specified

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Abbreviations and acronyms	
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
OSHA	Occupational Safety Health Administration
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
PPE	Personal protection equipment
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
TF	Technical function
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
TWA	Time Weighted Average
VOC	Volatile Organic Compounds
vPvB	Very Persistent and Very Bioaccumulative
UFI	Unique Formula Identifier

Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.



# IgG Isolation Buffer

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Date of issue: 7/8/2016 Revision date: 1/17/2025 Supersedes: 1/14/2025 Version: 9.0

### SECTION 1 Identification

#### 1.1. Product identifier

Product form : Substance  
Substance name : IgG Isolation Buffer  
Product code : 0611

#### 1.2. Other means of identification

No additional information available

#### 1.3. Recommended use of the chemical and restrictions on use

No additional information available

#### 1.4. Supplier's details

G-Biosciences/ Geno Technology, Inc.  
9800 Page Avenue  
St. Louis, MO 63132-1429, USA  
Tel.1-800-628-7730  
[www.GBiosciences.com](http://www.GBiosciences.com)

#### 1.5. Emergency phone number

Emergency number : Chemtrec **1-800-424-9300** (USA/Canada), **+1-703-527-3887** (Intl)

### SECTION 2 Hazard Identification

#### 2.1. Classification of the substance or mixture

##### GHS US classification

Not classified

#### 2.2. Label elements

##### GHS US labeling

No labeling applicable

#### 2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

#### 2.4. Hazards not otherwise classified

No additional information available

#### 2.5. Unknown acute toxicity

No additional information available

### SECTION 3 Composition/information on ingredients

#### 3.1. Substances

Name : IgG Isolation Buffer

# IgG Isolation Buffer

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Name	Common Name (Synonyms)	Product identifier	%	GHS US classification
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Sodium phosphate monobasic	acid sodium phosphate / acid sodium phosphate, anhydrous / Bolifor MSP, monosodium phosphate / E339 / E339(a) food grade / monobasic sodium phosphate / monosodium dihydrogen orthophosphate / monosodium dihydrogen phosphate / monosodium dihydrogen phosphate, anhydrous / monosodium hydrogen phosphate / monosodium orthophosphate / monosodium orthophosphate, anhydrous / monosodium phosphate / monosodium phosphate, anhydrous / monosorb XP-4 / MSP / MSP, anhydrous / phosphoric acid monosodium salt, anhydrous / phosphoric acid, monosodium salt / primary-sodium phosphate / primary-sodiumphosphate, anhydrous / sodium acid phosphate / sodium acid phosphate, anhydrous / sodium biphosphate / sodium	CAS-No.: 7558-80-7	100	Not classified
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Name	Common Name (Synonyms)	Product identifier	%	GHS US classification
	biphosphate, anhydrous / sodium dihydrogen monophosphate / sodium dihydrogen phosphate (NaH <sub>2</sub> PO <sub>4</sub> ) / sodium dihydrogen phosphate, anhydrous / sodium dihydrogenorthop hosphate / sodium monobasic phosphate (NaH <sub>2</sub> PO <sub>4</sub> ) / sodium orthophosphate, primary / sodium phosphate (Na(H <sub>2</sub> PO <sub>4</sub> )) / sodium phosphate, monobasic / sodium phosphate, monobasic, anhydrous / sodium primary phosphate			

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

### 3.2. Mixtures

Not applicable

## SECTION 4 First aid measures

### 4.1. Description of necessary first-aid measures

First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Allow affected person to breathe fresh air. Allow the victim to rest.
First-aid measures after skin contact	: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Wash skin with plenty of water.
First-aid measures after eye contact	: Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists. Rinse eyes with water as a precaution.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a poison center/doctor/physician if you feel unwell.

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Self protection of the first-aider : First aid workers will be equipped with suitable personal protective equipment.

### 4.2. Most important symptoms/effects, acute and delayed

Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met.  
Symptoms/effects : Not expected to present a significant hazard under anticipated conditions of normal use.  
Symptoms/effects after inhalation : None under normal conditions. Dust of the product, if present, may cause respiratory irritation after an excessive inhalation exposure.  
Symptoms/effects after skin contact : None under normal conditions. Dust may cause irritation in skin folds or by contact in combination with tight clothing.  
Symptoms/effects after eye contact : None under normal conditions. Dust from this product may cause eye irritation.  
Symptoms/effects after ingestion : None under normal conditions.

### 4.3. Indication of immediate medical attention and special treatment needed, if necessary

Other medical advice or treatment : Treat symptomatically.

## SECTION 5: Fire-fighting measures

### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.  
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.

### 5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment. Do not enter fire area without proper protective equipment, including respiratory protection.  
Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. 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 : Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material-damage.

#### For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.  
Emergency procedures : Ventilate spillage area. Evacuate unnecessary personnel.

#### For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal protection".  
Emergency procedures : Ventilate area. Evacuate unnecessary personnel.

Environmental precautions : Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

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### 6.2. Methods and materials for containment and cleaning up

For containment	: Using a clean shovel, put the material in a dry container and cover without compressing it.
Methods for cleaning up	: Mechanically recover the product. On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials.
Other information	: Dispose of materials or solid residues at an authorized site.

See Heading 8. Exposure controls and personal protection. For further information refer to section 13.

## SECTION 7 Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling	: Ensure good ventilation of the work station. Wear personal protective equipment. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.
Hygiene measures	: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
Additional hazards when processed	: Not expected to present a significant hazard under anticipated conditions of normal use.

### 7.2. Conditions for safe storage, including incompatibilities

Technical measures	: Keep in a cool, well-ventilated place away from heat.
Storage conditions	: Store in a well-ventilated place. Keep cool. Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use.
Incompatible products	: Strong bases. Strong acids.
Incompatible materials	: Sources of ignition. Direct sunlight.
Packaging materials	: Store always product in container of same material as original container.

## SECTION 8 Exposure controls/personal protection

### 8.1. Control parameters

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, such as personal protective equipment

#### Personal protective equipment:

Avoid all unnecessary exposure.

<b>Hand protection:</b>
Protective gloves. Wear protective gloves.
<b>Eye protection:</b>
Chemical goggles or safety glasses. Safety glasses
<b>Skin and body protection:</b>
Wear suitable protective clothing
<b>Respiratory protection:</b>
In case of insufficient ventilation, wear suitable respiratory equipment. Wear appropriate mask

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### Personal protective equipment symbol(s):



### Other information:

Do not eat, drink or smoke during use.

## SECTION 9 Physical and chemical properties

### 9.1. Basic physical and chemical properties

Physical state	: Solid
Color	: Colorless
Odor	: characteristic
Odor threshold	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: Not applicable
Boiling point	: No data available
Flash point	: Not applicable
Flammability (solid, gas)	: Non flammable.
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	: Not applicable
Decomposition temperature	: No data available
Viscosity, kinematic	: Not applicable
Explosion limits	: Not applicable
Particle characteristics	: No data available

### 9.2. Data relevant with regard to physical hazard classes (supplemental)

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. Not established.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use. Not established.

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7). Direct sunlight. Extremely high or low temperatures.

### 10.5. Incompatible materials

Strong acids. Strong bases.

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### 10.6. Hazardous decomposition products

Hazardous decomposition products. fume. Carbon monoxide. Carbon dioxide.

## 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

#### Sodium phosphate monobasic (7558-80-7)

LD50 oral rat	> 2000 mg/kg body weight (OECD 420: Acute Oral toxicity – Acute Toxic Class Method, Rat, Female, Experimental value, Oral, 14 day(s))
LD50 dermal rat	> 2000 mg/kg body weight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat	> 0.83 mg/l (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, Inhalation (dust))

Skin corrosion/irritation : Not classified

#### Sodium phosphate monobasic (7558-80-7)

pH	5.5 – 6.5 (1 %)
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Serious eye damage/irritation : Not classified

#### Sodium phosphate monobasic (7558-80-7)

pH	5.5 – 6.5 (1 %)
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Respiratory or skin sensitization : Not classified  
Germ cell mutagenicity : Not classified  
Carcinogenicity : Not classified  
Reproductive toxicity : Not classified  
STOT-single exposure : Not classified  
STOT-repeated exposure : Not classified

#### Sodium phosphate monobasic (7558-80-7)

NOAEL (subchronic,oral,animal/male,90 days)	322.88 mg/kg body weight Animal: dog, Animal sex: male
NOAEL (subchronic,oral,animal/female,90 days)	492.77 mg/kg body weight Animal: dog, Animal sex: female

Aspiration hazard : Not classified

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Viscosity, kinematic	Not applicable
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#### Sodium phosphate monobasic (7558-80-7)

Viscosity, kinematic	Not applicable
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Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

Symptoms/effects : Not expected to present a significant hazard under anticipated conditions of normal use.

Symptoms/effects after inhalation : None under normal conditions. Dust of the product, if present, may cause respiratory irritation after an excessive inhalation exposure.

Symptoms/effects after skin contact : None under normal conditions. Dust may cause irritation in skin folds or by contact in combination with tight clothing.

Symptoms/effects after eye contact : None under normal conditions. Dust from this product may cause eye irritation.

Symptoms/effects after ingestion : None under normal conditions.

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### SECTION 12 Ecological information

#### 12.1. Ecotoxicity

Ecology - general	: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Not classified

Sodium phosphate monobasic (7558-80-7)	
LC50 - Fish [1]	> 100 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Semi-static system, Fresh water, Experimental value, GLP)
EC50 - Crustacea [1]	> 100 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)
EC50 72h - Algae [1]	> 100 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
ErC50 algae	> 100 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, GLP)

#### 12.2. Persistence and degradability

IgG Isolation Buffer	
Persistence and degradability	Not established.

  

Sodium phosphate monobasic (7558-80-7)	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

#### 12.3. Bioaccumulative potential

IgG Isolation Buffer	
Bioaccumulative potential	Not established.

  

Sodium phosphate monobasic (7558-80-7)	
Partition coefficient n-octanol/water (Log Pow)	-3.96 (Estimated value)
Bioaccumulative potential	Not bioaccumulative.

#### 12.4. Mobility in soil

Sodium phosphate monobasic (7558-80-7)	
Ecology - soil	No (test) data on mobility of the substance available.

#### 12.5. Other adverse effects

Ozone	: Not classified
Fluorinated greenhouse gases	: No
Other information	: Avoid release to the environment.

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### SECTION 13 Disposal considerations

Regional legislation (waste)	: Disposal must be done according to official regulations.
Waste treatment methods	: Waste treatment methods.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations. Disposal must be done according to official regulations.
Additional information	: Do not re-use empty containers.
Ecological waste information	: Avoid release to the environment.

### SECTION 14 Transport information

In accordance with DOT / TDG / IATA

#### 14.1. UN number

Not regulated for transport

#### 14.2. UN Proper Shipping Name

Proper Shipping Name (DOT)	: Not regulated
Proper Shipping Name (TDG)	: Not regulated
Proper Shipping Name (IATA)	: Not regulated

#### 14.3. Transport hazard class(es)

##### DOT

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

##### TDG

Transport hazard class(es) (TDG) : Not regulated

##### IATA

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

#### 14.4. Packing group

Packing group (DOT)	: Not regulated
Packing group (TDG)	: Not regulated
Packing group (IATA)	: Not regulated

#### 14.5. Environmental hazards

Other information : No supplementary information available.

#### 14.6. Transport in bulk

Not applicable

#### 14.7. Special precautions for user

##### DOT

Not regulated

##### TDG

Not regulated

##### IATA

Not regulated

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### SECTION 15 Regulatory information

#### 15.1. Federal regulations

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

Name	CAS-No.	Listing	Commercial status	Flags
Sodium phosphate monobasic	7558-80-7	Present		

#### 15.2. International regulations

##### CANADA

##### Sodium phosphate monobasic (7558-80-7)

Listed on the Canadian DSL (Domestic Substances List)

##### EU-Regulations

No additional information available

##### National regulations

No additional information available

#### 15.3. State regulations

No additional information available

### SECTION 16 Other information

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Revision date : 1/17/2025

Date of issue : 7/8/2016

Other information : None.

Abbreviations and acronyms	
ACGIH	American Conference of Government Industrial Hygienists
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
CAS-No.	Chemical Abstract Service number
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
COD	Chemical oxygen demand (COD)
CSA	Chemical safety assessment
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number

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Abbreviations and acronyms	
EC50	Median effective concentration
ED	Endocrine disruptor
EN	European Standard
EWC	European waste catalogue
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
Log Kow	Partition coefficient n-octanol/water (Log Kow)
Log Pow	Partition coefficient n-octanol/water (Log Pow)
MAK	maximum workplace concentration
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
N.O.S.	Not Otherwise Specified
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
OSHA	Occupational Safety & Health Administration
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
PPE	Personal protection equipment
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
TF	Technical function
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
TWA	Time Weighted Average
VOC	Volatile Organic Compounds
vPvB	Very Persistent and Very Bioaccumulative
UFI	Unique Formula Identifier

Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.