

1. PRODUCT AND COMPANY IDENTIFICATION

A. PRODUCT IDENTIFIERS

PRODUCT NAME : **xGen® 2X Hybridization Buffer**
 INDEX # : **N/A**
 CAS # : **N/A**

B. DETAILS OF SUPPLIER OF THE SAFETY DATA SHEET

COMPANY : **Integrated DNA Technologies**
 : **1710 Commercial Park**
 : **Coralville, IA 52241**

TELEPHONE : **1-800-328-2661**
 EMERGENCY PHONE # : **24-Hour Emergency Telephone:**
CHEMTREC: 1-800-424-9300

Note: CHEMTREC's emergency number is to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure, or accident involving chemicals.

C. RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE

For research and development purposes only.

2. HAZARD IDENTIFICATION

A. PICTOGRAM:



B. SIGNAL WORD:

DANGER

C. HAZARD STATEMENTS:

H301 + H311	Toxic if swallowed or in contact with skin
H315	Causes skin irritation
H319 H335	Causes serious eye irritation
H335	May cause respiratory irritation

D. PRECAUTIONARY STATEMENTS:

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 protective gloves/eye protection/face protection.
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P330	Rinse mouth.
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P361	Remove/Take off all contaminated clothing immediately.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/container through an approved waste disposal plant.

3. COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENTS	CAS #	PERCENT	HAZARDOUS CLASSIFICATION
Tetramethylammonium chloride	75-57-0	25–35%	Acute Tox. 2; Acute Tox. 3; Skin Irrit. 2; STOT SE 1; Aquatic Chronic 2; H300, H311, H315, H370, H411
2-(N-Morpholino)ethanesulfonic acid hydrate	1266615-59-1	1–5%	STOT-SE 2

4. FIRST AID MEASURES

SKIN CONTACT:	Remove contaminated clothing. Flush affected area with water and then wash with soap or mild detergent and water. Observe for signs of irritation. If irritation is present, get medical attention.
EYE CONTACT:	Wash eyes with large amounts of water or normal saline for at least 15 minutes. Observe for signs of irritation. If irritation is present, get medical attention.
INGESTION:	Get medical attention.
INHALATION:	Remove from exposure area to fresh air immediately. Get medical attention immediately.
INJECTION:	If accidentally injected, get medical attention.
NOTE TO PHYSICIAN:	Treat symptomatically.

5. FIRE FIGHTING MEASURES

FIRE EXTINGUISHING MEDIA:	Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.
SPECIFIC HAZARDS ARISING FROM THE CHEMICAL:	Thermal decomposition can lead to release of irritating gases and vapors. Keep product and empty container away from heat and sources of ignition.

6. ACCIDENTAL RELEASE MEASURES

OCCUPATIONAL SPILL:	Wear appropriate protective clothing and chemically compatible gloves. Absorb with appropriate sorbent material and place spillage in appropriate container for waste disposal. Do not use combustible materials as a sorbent. Report spills to the environment of any spill materials that reach the RQ.
REPORTABLE QUANTITY (RQ):	Not Applicable

7. HANDLING AND STORAGE

Observe all federal, state, and local regulations. Do not breathe. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Keep tightly closed. Store in a cool dry place (for prolonged storage, store at 4° C or –20°C). Use prudent laboratory practices for handling and storage of chemical substances of unknown toxicity.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE CONTROLS:	Use in a laboratory hood or other ventilated device. OSHA, ACGIH, or NIOSH have not established occupational exposure limits for this substance. Use prudent laboratory practices for handling chemical substances of unknown toxicity.
EYE PROTECTION:	Wear splash-proof or dust-resistant safety goggles to prevent eye contact with this substance.
CLOTHING:	Wear appropriate protective clothing (laboratory coat with long sleeves) and equipment to prevent skin contact with this material.
GLOVES:	Wear appropriate protective gloves to prevent contact with this material.

9. PHYSICAL AND CHEMICAL PROPERTIES

DESCRIPTION:	Colorless liquid; slightly viscous
ODOR:	mild
PH:	7.5
MELTING POINT:	No data available
INITIAL BOILING POINT:	No data available
FLASH POINT:	No data available
UPPER EXPLOSIVE LIMIT:	No data available
LOWER EXPLOSIVE LIMIT:	No data available
VAPOR PRESSURE:	No data available
VAPOR DENSITY:	No data available
RELATIVE DENSITY:	No data available
WATER SOLUBILITY:	Completely miscible

10. STABILITY AND REACTIVITY

REACTIVITY:	Stable under recommended storage conditions
CONDITIONS TO AVOID:	Incompatible products; excess heat; dust formation.
INCOMPATIBILITIES:	Strong oxidizing agents
POLYMERIZATION:	Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

TOXICITY:	The toxicological properties of this material have not been investigated. For research and development purposes only.
CARCINOGEN STATUS:	No information available
LOCAL EFFECTS:	No information available
TARGET EFFECTS:	No information available
AT INCREASED RISK FROM EXPOSURE:	No information available
CARCINOGEN/REPRODUCTIVE TOXIN STATUS	
IARC:	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by IARC.
ACGIH:	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by ACGIH.
NTP:	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by NTP.
OSHA:	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by OSHA.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL IMPACT RATING (0–4):	No data available
ACUTE AQUATIC TOXICITY:	No data available
DEGRADABILITY:	No data available
LOG BIOCONCENTRATION FACTOR (BCF):	No data available

13. DISPOSAL CONSIDERATIONS

Observe all federal, state, and local regulations.

14. TRANSPORTATION INFORMATION

UN number: 2810 Class: 6.1 packing group: III

Proper shipping name: Toxic, liquids, organic, n.o.s. (Tetramethylammonium chloride)

Reportable Quantity (RQ):

15. REGULATORY INFORMATION

The toxicological properties of this material have not been investigated.

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (*de minimis*) reporting levels established by SARA Title III, Section 313.

SARA 311-312 Hazards

Acute Health Hazard

Chemical	STATE	CAS-No	Revision Date
Tetramethylammonium chloride	Pennsylvania	75-57-0	
	New Jersey	75-57-0	

16. OTHER INFORMATION

POTENTIAL HEALTH EFFECTS:

SKIN CONTACT:	Short-term exposure:	May be harmful if absorbed through skin
	Long-term exposure:	No information available
EYE CONTACT:	Short-term exposure:	Corrosive to mucus membranes
	Long-term exposure:	No information available
INGESTION:	Short-term exposure:	Toxic if swallowed; corrosive to mucus membranes
	Long-term exposure:	No information available
INHALATION:	Short-term exposure:	May be toxic if inhaled; corrosive to mucus membranes
	Long-term exposure:	No information available
INJECTION:	Short-term exposure:	May be harmful if injected
	Long-term exposure:	No information available

THE AFOREMENTIONED INFORMATION IS BELIEVED TO BE CORRECT, BUT DOES NOT PURPORT TO BE ALL INCLUSIVE AND SHALL BE USED ONLY AS A GUIDE. INTEGRATED DNA TECHNOLOGIES SHALL NOT BE HELD LIABLE FOR ANY DAMAGE RESULTING FROM HANDLING OR FROM CONTACT WITH THE ABOVE PRODUCT.

1. PRODUCT AND COMPANY IDENTIFICATION

A. PRODUCT IDENTIFIERS

PRODUCT NAME : **xGen® 10X Stringent Wash Buffer**
INDEX # : **N/A**
CAS # : **N/A**

B. DETAILS OF SUPPLIER OF THE SAFETY DATA SHEET

COMPANY : **Integrated DNA Technologies**
: **1710 Commercial Park**
: **Coralville, IA 52241**

TELEPHONE : **1-800-328-2661**
EMERGENCY PHONE # : **24-Hour Emergency Telephone:**
CHEMTREC: 1-800-424-9300

Note: CHEMTREC's emergency number is to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure, or accident involving chemicals.

C. RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE

For research and development purposes only.

2. HAZARD IDENTIFICATION

GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS

THIS PRODUCT IS CONSIDERED NON-HAZARDOUS. Per OSHA 29CFR1910.1200, Commonwealth of Australia [NOHSC: 1005, 1008(1999)], and the latest amendments to the European Union Directives 67/548/EC and 1999/45/EC, this product does not require a Material Safety Data Sheet (MSDS) or Safety Data Sheet (SDS). This product does not contain more than 1% of a component classified as hazardous and does not contain more than 0.1% of a component classified as carcinogenic. Despite the classification of certain products/components as non-hazardous, we strongly recommend use of prudent laboratory practices: avoid unnecessary contact and use personal protective equipment, which may include gloves, eye protection, and lab coats, during the use of any laboratory reagent. IDT shall not be held liable for any damages resulting from handling or from contact with the above product.

A. PICTOGRAM: N/A
B. SIGNAL WORD: N/A
C. HAZARD STATEMENTS: N/A
D. PRECAUTIONARY STATEMENTS: N/A

3. COMPOSITION/INFORMATION ON INGREDIENTS

This mixture does not contain any substances considered to be hazardous by OSHA 29 CFR 1910.1200.

4. FIRST AID MEASURES

SKIN CONTACT: **Remove contaminated clothing. Flush affected area with water and then wash with soap or mild detergent and water. Observe for signs of irritation. If irritation is present, get medical attention.**

EYE CONTACT: **Wash eyes with large amounts of water or normal saline for at least 15 minutes. Observe for signs of irritation. If irritation is present, get medical attention.**

INGESTION: **Get medical attention.**

INHALATION: **Remove from exposure area to fresh air immediately. Get medical attention immediately.**

INJECTION: **If accidentally injected, get medical attention.**

NOTE TO PHYSICIAN: **Treat symptomatically.**

5. FIRE FIGHTING MEASURES
- FIRE AND EXPLOSION HAZARD: **None known to exist.**
- FIRE EXTINGUISHING MEDIA: **Dry chemical, foam, carbon dioxide or water.**
6. ACCIDENTAL RELEASE MEASURES
- OCCUPATIONAL SPILL: **Wear appropriate protective clothing and chemically compatible gloves. Absorb with appropriate sorbent material and place spillage in appropriate container for waste disposal. Do not use combustible materials as a sorbent. Report spills to the environment of any spill materials that reach the RQ.**
- REPORTABLE QUANTITY (RQ): **Not Applicable**
7. HANDLING AND STORAGE
- Observe all federal, state, and local regulations. Do not breathe. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Keep tightly closed. Store in a cool, dry place (for prolonged storage, store at 4° C or –20°C). Use prudent laboratory practices for handling and storage of chemical substances of unknown toxicity.**
8. EXPOSURE CONTROLS/PERSONAL PROTECTION
- EXPOSURE CONTROLS: **Use in a laboratory hood or other ventilated device. OSHA, ACGIH, or NIOSH have not established occupational exposure limits for this substance. Use prudent laboratory practices for handling chemical substances of unknown toxicity.**
- EYE PROTECTION: **Wear splash-proof or dust-resistant safety goggles to prevent eye contact with this substance.**
- CLOTHING: **Wear appropriate protective clothing (laboratory coat with long sleeves) and equipment to prevent skin contact with this material.**
- GLOVES: **Wear appropriate protective gloves to prevent contact with this material.**
9. PHYSICAL AND CHEMICAL PROPERTIES
- DESCRIPTION: **Colorless, odorless liquid**
- PH: **6.5**
- MELTING POINT: **No data available**
- INITIAL BOILING POINT: **No data available**
- FLASH POINT: **The product is not flammable.**
- UPPER EXPLOSIVE LIMIT: **No data available**
- LOWER EXPLOSIVE LIMIT: **No data available**
- VAPOR PRESSURE: **No data available**
- VAPOR DENSITY: **No data available**
- RELATIVE DENSITY: **No data available**
- WATER SOLUBILITY: **Completely miscible**
10. STABILITY AND REACTIVITY
- REACTIVITY: **Stable under recommended storage conditions**
- CONDITIONS TO AVOID **Incompatible products; excess heat; dust formation**
- INCOMPATIBILITIES: **Strong oxidizing agents**
- POLYMERIZATION: **Hazardous polymerization will not occur.**

11. TOXICOLOGICAL INFORMATION

TOXICITY:	The toxicological properties of this material have not been investigated. For research and development purposes only.
CARCINOGEN STATUS:	No information available
LOCAL EFFECTS:	No information available
TARGET EFFECTS:	No information available
AT INCREASED RISK FROM EXPOSURE:	No information available
CARCINOGEN/REPRODUCTIVE TOXIN STATUS	
IARC:	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by IARC.
ACGIH:	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by ACGIH.
NTP:	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by NTP.
OSHA:	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by OSHA.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL IMPACT RATING (0–4):	No data available
ACUTE AQUATIC TOXICITY:	No data available
DEGRADABILITY:	No data available
LOG BIOCONCENTRATION FACTOR (BCF):	No data available

13. DISPOSAL CONSIDERATIONS

Observe all federal, state, and local regulations.

14. TRANSPORTATION INFORMATION

Not regulated

15. REGULATORY INFORMATION

The toxicological properties of this material have not been investigated.

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (*de minimis*) reporting levels established by SARA Title III, Section 313.

SARA 311-312 Hazards

This material does not contain any chemical components with known CAS numbers that exceed the threshold (*de minimis*) reporting levels established by SARA Title III, Section 311/312.

SARA 313: Right to Know Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (*de minimis*) reporting levels established by SARA Title III, Section 313.

16. OTHER INFORMATION

POTENTIAL HEALTH EFFECTS:

SKIN CONTACT:	Short-term exposure:	May be harmful if absorbed through skin
	Long-term exposure:	No information available
EYE CONTACT:	Short-term exposure:	Corrosive to mucus membranes
	Long-term exposure:	No information available
INGESTION:	Short-term exposure:	Toxic if swallowed; corrosive to mucus membranes
	Long-term exposure:	No information available
INHALATION:	Short-term exposure:	May be toxic if inhaled; corrosive to mucus membranes
	Long-term exposure:	No information available
INJECTION:	Short-term exposure:	May be harmful if injected
	Long-term exposure:	No information available

THE AFOREMENTIONED INFORMATION IS BELIEVED TO BE CORRECT, BUT DOES NOT PURPORT TO BE ALL INCLUSIVE AND SHALL BE USED ONLY AS A GUIDE. INTEGRATED DNA TECHNOLOGIES SHALL NOT BE HELD LIABLE FOR ANY DAMAGE RESULTING FROM HANDLING OR FROM CONTACT WITH THE ABOVE PRODUCT.

1. PRODUCT AND COMPANY IDENTIFICATION

A. PRODUCT IDENTIFIERS

PRODUCT NAME : **xGen® Hybridization Buffer Enhancer**
 INDEX # : **N/A**
 CAS # : **N/A**

B. DETAILS OF SUPPLIER OF THE SAFETY DATA SHEET

COMPANY : **Integrated DNA Technologies**
 : **1710 Commercial Park**
 : **Coralville, IA 52241**

TELEPHONE : **1-800-328-2661**
 EMERGENCY PHONE # : **24-Hour Emergency Telephone:**
CHEMTREC: 1-800-424-9300

Note: CHEMTREC's emergency number is to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure, or accident involving chemicals.

C. RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE

For research and development purposes only.

2. HAZARD IDENTIFICATION

A. GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS

I. PICTOGRAM:



II. SIGNAL WORD: **DANGER**

III. HAZARD STATEMENTS:

H351 Suspected of causing cancer
H360 May damage fertility or the unborn child
H373 May cause damage to organs (blood) through prolonged or repeated exposure if swallowed

IV. PRECAUTIONARY STATEMENTS:

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe dust/fume/gas/mist/vapors/spray.
P281 Use personal protective equipment as required.
P308 + P313 If exposed or concerned: Get medical advice/attention.
P405 Store locked up.
P501 Dispose of contents/container to an approved waste disposal plant.

3. COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENTS	CAS #	PERCENT	HAZARDOUS CLASSIFICATION
Formamide	75-12-7		Carc. 2; Repr. 1B; STOT RE 2; H351, H360, H373H335, H401, H412

4. FIRST AID MEASURES
- SKIN CONTACT: Remove contaminated clothing. Flush affected area with water and then wash with soap or mild detergent and water. Observe for signs of irritation. If irritation is present, get medical attention.
- EYE CONTACT: Wash eyes with large amounts of water or normal saline for at least 15 minutes. Observe for signs of irritation. If irritation is present, get medical attention.
- INGESTION: Get medical attention.
- INHALATION: Remove from exposure area to fresh air immediately. Get medical attention immediately.
- INJECTION: If accidentally injected, get medical attention.
- NOTE TO PHYSICIAN: Treat symptomatically.
5. FIRE FIGHTING MEASURES
- FIRE EXTINGUISHING MEDIA: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
- SPECIFIC HAZARDS ARISING FROM THE CHEMICAL Carbon oxides, sulphur oxides, sodium oxides
6. ACCIDENTAL RELEASE MEASURES
- OCCUPATIONAL SPILL: Wear appropriate protective clothing and chemically compatible gloves. Absorb with appropriate sorbent material and place spillage in appropriate container for waste disposal. Do not use combustible materials as a sorbent. Report spills to the environment of any spill materials that reach the RQ.
- REPORTABLE QUANTITY (RQ): Not Applicable
7. HANDLING AND STORAGE
- Observe all federal, state, and local regulations. Do not breathe. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Keep tightly closed. Store in a cool dry place (for prolonged storage, store at 4° C). Use prudent laboratory practices for handling and storage of chemical substances of unknown toxicity.**
8. EXPOSURE CONTROLS/PERSONAL PROTECTION
- EXPOSURE CONTROLS: Use in a laboratory hood or other ventilated device. OSHA, ACGIH, or NIOSH have not established occupational exposure limits for this substance. Use prudent laboratory practices for handling chemical substances of unknown toxicity.
- EYE PROTECTION: Wear splash-proof or dust-resistant safety goggles to prevent eye contact with this substance.
- CLOTHING: Wear appropriate protective clothing (laboratory coat with long sleeves) and equipment to prevent skin contact with this material.
- GLOVES: Wear appropriate protective gloves to prevent contact with this material.

9. PHYSICAL AND CHEMICAL PROPERTIES

DESCRIPTION:	Colorless to yellow liquid
ODOR	Ammonia-like
PH	4–10 at 200 g/L at 20°C
MELTING POINT	2–3°C
INITIAL BOILING POINT	210°C
FLASH POINT	175°C
UPPER EXPLOSIVE LIMIT	19% (V)
LOWER EXPLOSIVE LIMIT	2.7% (V)
VAPOR PRESSURE	0.08 hPa at 20°C
VAPOR DENSITY	1.56 (Air = 1.0)
RELATIVE DENSITY	1.134 g/cm³ at 25°C
WATER SOLUBILITY	Completely miscible

10. STABILITY AND REACTIVITY

REACTIVITY:	Stable under recommended storage conditions
CONDITIONS TO AVOID:	Heat
INCOMPATIBILITIES:	Bases, oxidizing agents, hydrogen peroxide, iodine, pyridine, sulphur oxides
POLYMERIZATION:	No data available

11. TOXICOLOGICAL INFORMATION

TOXICITY:	The toxicological properties of this material have not been investigated. For research and development purposes only.
CARCINOGEN STATUS:	No information available
LOCAL EFFECTS:	No information available
TARGET EFFECTS:	Presumed human reproductive toxicant
AT INCREASED RISK FROM EXPOSURE:	No information available
CARCINOGEN/REPRODUCTIVE TOXIN STATUS	
IARC:	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by IARC.
ACGIH:	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by ACGIH.
NTP:	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by NTP.
OSHA:	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by OSHA.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL IMPACT RATING (0–4):	No data available
ACUTE AQUATIC TOXICITY:	No data available
DEGRADABILITY:	No data available
LOG BIOCONCENTRATION FACTOR (BCF):	No data available

13. DISPOSAL CONSIDERATIONS

Observe all federal, state, and local regulations.

14. TRANSPORTATION INFORMATION

NOT REGULATED

15. REGULATORY INFORMATION

The toxicological properties of this material have not been investigated.

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (*de minimis*) reporting levels established by SARA Title III, Section 313.

SARA 311-312 Hazards

Chronic Health Hazard

Chemical	State	CAS-No	Revision Date
Formamide	Pennsylvania	75-12-7	1994-04-01
	New Jersey	75-12-7	1994-04-01
	Massachusetts	75-12-7	1994-04-01

16. OTHER INFORMATION

POTENTIAL HEALTH EFFECTS:

SKIN CONTACT:	Short-term exposure:	May be harmful if absorbed through skin
	Long-term exposure:	No information available
EYE CONTACT:	Short-term exposure:	Corrosive to mucus membranes
	Long-term exposure:	No information available
INGESTION:	Short-term exposure:	Toxic if swallowed; corrosive to mucus membranes
	Long-term exposure:	No information available
INHALATION:	Short-term exposure:	May be toxic if inhaled; corrosive to mucus membranes.
	Long-term exposure:	No information available
INJECTION:	Short-term exposure:	May be harmful if injected
	Long-term exposure:	No information available

THE AFOREMENTIONED INFORMATION IS BELIEVED TO BE CORRECT, BUT DOES NOT PURPORT TO BE ALL INCLUSIVE AND SHALL BE USED ONLY AS A GUIDE. INTEGRATED DNA TECHNOLOGIES SHALL NOT BE HELD LIABLE FOR ANY DAMAGE RESULTING FROM HANDLING OR FROM CONTACT WITH THE ABOVE PRODUCT.

1. PRODUCT AND COMPANY IDENTIFICATION

A. PRODUCT IDENTIFIERS

PRODUCT NAME : **xGen® 2X Bead Wash Buffer**
INDEX # : **N/A**
CAS # : **N/A**

B. DETAILS OF SUPPLIER OF THE SAFETY DATA SHEET

COMPANY : **Integrated DNA Technologies**
: **1710 Commercial Park**
: **Coralville, IA 52241**

TELEPHONE : **1-800-328-2661**
EMERGENCY PHONE # : **24-Hour Emergency Telephone:**
CHEMTREC: 1-800-424-9300

Note: CHEMTREC's emergency number is to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure, or accident involving chemicals.

C. RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE

For research and development purposes only.

2. HAZARD IDENTIFICATION

GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS

THIS PRODUCT IS CONSIDERED NON-HAZARDOUS. Per OSHA 29CFR1910.1200, Commonwealth of Australia [NOHSC: 1005, 1008(1999)], and the latest amendments to the European Union Directives 67/548/EC and 1999/45/EC, this product does not require a Material Safety Data Sheet (MSDS) or Safety Data Sheet (SDS). This product does not contain more than 1% of a component classified as hazardous and does not contain more than 0.1% of a component classified as carcinogenic. Despite the classification of certain products/components as non-hazardous, we strongly recommend use of prudent laboratory practices: avoid unnecessary contact and use personal protective equipment, which may include gloves, eye protection, and lab coats, during the use of any laboratory reagent. IDT shall not be held liable for any damages resulting from handling or from contact with the above product.

A. PICTOGRAM: N/A
B. SIGNAL WORD: N/A
C. HAZARD STATEMENTS: N/A
D. PRECAUTIONARY STATEMENTS: N/A

3. COMPOSITION/INFORMATION ON INGREDIENTS

This mixture does not contain any substances considered to be hazardous by OSHA 29 CFR 1910.1200.

4. FIRST AID MEASURES

SKIN CONTACT: **Remove contaminated clothing. Flush affected area with water and then wash with soap or mild detergent and water. Observe for signs of irritation. If irritation is present, get medical attention.**

EYE CONTACT: **Wash eyes with large amounts of water or normal saline for at least 15 minutes. Observe for signs of irritation. If irritation is present, get medical attention.**

INGESTION: **Get medical attention.**

INHALATION: **Remove from exposure area to fresh air immediately. Get medical attention immediately.**

INJECTION: **If accidentally injected, get medical attention.**

NOTE TO PHYSICIAN: **Treat symptomatically.**

5. FIRE FIGHTING MEASURES
 FIRE AND EXPLOSION HAZARD: **None known to exist.**
 FIRE EXTINGUISHING MEDIA: **Dry chemical, foam, carbon dioxide or water.**
6. ACCIDENTAL RELEASE MEASURES
 OCCUPATIONAL SPILL: **Wear appropriate protective clothing and chemically compatible gloves. Absorb with appropriate sorbent material and place spillage in appropriate container for waste disposal. Do not use combustible materials as a sorbent. Report spills to the environment of any spill materials that reach the RQ.**
 REPORTABLE QUANTITY (RQ): **Not Applicable**
7. HANDLING AND STORAGE
Observe all federal, state, and local regulations. Do not breathe. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Keep tightly closed. Store in a cool dry place (for prolonged storage, store at 4° C or –20°C). Use prudent laboratory practices for handling and storage of chemical substances of unknown toxicity.
8. EXPOSURE CONTROLS/PERSONAL PROTECTION
 EXPOSURE CONTROLS: **Use in a laboratory hood or other ventilated device. OSHA, ACGIH, or NIOSH have not established occupational exposure limits for this substance. Use prudent laboratory practices for handling chemical substances of unknown toxicity.**
 EYE PROTECTION: **Wear splash-proof or dust-resistant safety goggles to prevent eye contact with this substance.**
 CLOTHING: **Wear appropriate protective clothing (laboratory coat with long sleeves) and equipment to prevent skin contact with this material.**
 GLOVES: **Wear appropriate protective gloves to prevent contact with this material.**
9. PHYSICAL AND CHEMICAL PROPERTIES
 DESCRIPTION: **Colorless, odorless liquid**
 PH: **7.5**
 MELTING POINT: **No data available**
 INITIAL BOILING POINT: **No data available**
 FLASH POINT: **The product is not flammable.**
 UPPER EXPLOSIVE LIMIT: **No data available**
 LOWER EXPLOSIVE LIMIT: **No data available**
 VAPOR PRESSURE: **No data available**
 VAPOR DENSITY: **No data available**
 RELATIVE DENSITY: **No data available**
 WATER SOLUBILITY: **Completely miscible**
10. STABILITY AND REACTIVITY
 REACTIVITY: **Stable under recommended storage conditions**
 CONDITIONS TO AVOID: **Incompatible products; excess heat; dust formation**
 INCOMPATIBILITIES: **Strong oxidizing agents**
 POLYMERIZATION: **Hazardous polymerization will not occur.**

11. TOXICOLOGICAL INFORMATION

TOXICITY:	The toxicological properties of this material have not been investigated. For research and development purposes only.
CARCINOGEN STATUS:	No information available
LOCAL EFFECTS:	No information available
TARGET EFFECTS:	No information available
AT INCREASED RISK FROM EXPOSURE:	No information available
CARCINOGEN/REPRODUCTIVE TOXIN STATUS	
IARC:	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by IARC.
ACGIH:	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by ACGIH.
NTP:	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by NTP.
OSHA:	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by OSHA.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL IMPACT RATING (0–4):	No data available
ACUTE AQUATIC TOXICITY:	No data available
DEGRADABILITY:	No data available
LOG BIOCONCENTRATION FACTOR (BCF):	No data available

13. DISPOSAL CONSIDERATIONS

Observe all federal, state, and local regulations.

14. TRANSPORTATION INFORMATION

Not regulated

15. REGULATORY INFORMATION

The toxicological properties of this material have not been investigated.

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (*de minimis*) reporting levels established by SARA Title III, Section 313.

SARA 311-312 Hazards

This material does not contain any chemical components with known CAS numbers that exceed the threshold (*de minimis*) reporting levels established by SARA Title III, Section 311/312.

SARA 313: Right to Know Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (*de minimis*) reporting levels established by SARA Title III, Section 313.

16. OTHER INFORMATION

POTENTIAL HEALTH EFFECTS:

SKIN CONTACT:	Short-term exposure:	May be harmful if absorbed through skin
	Long-term exposure:	No information available
EYE CONTACT:	Short-term exposure:	Corrosive to mucus membranes
	Long-term exposure:	No information available
INGESTION:	Short-term exposure:	Toxic if swallowed; corrosive to mucus membranes
	Long-term exposure:	No information available
INHALATION:	Short-term exposure:	May be toxic if inhaled; corrosive to mucus membranes
	Long-term exposure:	No information available
INJECTION:	Short-term exposure:	May be harmful if injected
	Long-term exposure:	No information available

THE AFOREMENTIONED INFORMATION IS BELIEVED TO BE CORRECT, BUT DOES NOT PURPORT TO BE ALL INCLUSIVE AND SHALL BE USED ONLY AS A GUIDE. INTEGRATED DNA TECHNOLOGIES SHALL NOT BE HELD LIABLE FOR ANY DAMAGE RESULTING FROM HANDLING OR FROM CONTACT WITH THE ABOVE PRODUCT.

1. PRODUCT AND COMPANY IDENTIFICATION

A. PRODUCT IDENTIFIERS

PRODUCT NAME : **xGen® 10X Wash Buffer I**
 INDEX # : **N/A**
 CAS # : **N/A**

B. DETAILS OF SUPPLIER OF THE SAFETY DATA SHEET

COMPANY : **Integrated DNA Technologies**
 : **1710 Commercial Park**
 : **Coralville, IA 52241**

TELEPHONE : **1-800-328-2661**
 EMERGENCY PHONE # : **24-Hour Emergency Telephone:**
CHEMTREC: 1-800-424-9300

Note: CHEMTREC's emergency number is to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure, or accident involving chemicals.

C. RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE

For research and development purposes only.

2. HAZARD IDENTIFICATION

A. PICTOGRAM:



B. SIGNAL WORD:

DANGER

C. HAZARD STATEMENTS:

H302 + H332	Harmful if swallowed or if inhaled
H315	Causes skin irritation
H335	May cause respiratory irritation
H401	Toxic to aquatic life
H412	Harmful to aquatic life with long lasting effects

D. PRECAUTIONARY STATEMENTS:

P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting/equipment.
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.
P273	Avoid release to the environment.
P280	Wear protective gloves/eye protection/face protection.
P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P362	Take off contaminated clothing and wash before reuse.
P370 + P378	In case of fire: Use dry sand, dry chemical, or alcohol-resistant foam for extinction.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.

P405
P501

Store locked up.
Dispose of contents/container via an approved waste disposal plant.

3. COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENTS	CAS #	PERCENT	HAZARDOUS CLASSIFICATION
Sodium dodecyl sulfate	151-21-3	1–10%	Flam. Sol. 2; Acute Tox. 4; Skin Irrit. 2; Eye Dam. 1; STOT SE 3; Aquatic Acute 2; Aquatic Chronic 3; H228, H302 + H332, H315, H318, H335, H401, H412

4. FIRST AID MEASURES

SKIN CONTACT:	Remove contaminated clothing. Flush affected area with water and then wash with soap or mild detergent and water. Observe for signs of irritation. If irritation is present, get medical attention.
EYE CONTACT:	Wash eyes with large amounts of water or normal saline for at least 15 minutes. Observe for signs of irritation. If irritation is present, get medical attention.
INGESTION:	Get medical attention.
INHALATION:	Remove from exposure area to fresh air immediately. Get medical attention immediately.
INJECTION:	If accidentally injected, get medical attention.
NOTE TO PHYSICIAN:	Treat symptomatically.

5. FIRE FIGHTING MEASURES

FIRE EXTINGUISHING MEDIA:	Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.
SPECIFIC HAZARDS ARISING FROM THE CHEMICAL:	Carbon oxides, Sulphur oxides, Sodium oxides

6. ACCIDENTAL RELEASE MEASURES

OCCUPATIONAL SPILL:	Wear appropriate protective clothing and chemically compatible gloves. Absorb with appropriate sorbent material and place spillage in appropriate container for waste disposal. Do not use combustible materials as a sorbent. Report spills to the environment of any spill materials that reach the RQ.
REPORTABLE QUANTITY (RQ):	Not Applicable

7. HANDLING AND STORAGE

Observe all federal, state, and local regulations. Do not breathe. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Keep tightly closed. Store in a cool dry place (for prolonged storage, store at 4° C or –20°C). Use prudent laboratory practices for handling and storage of chemical substances of unknown toxicity.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE CONTROLS:	Use in a laboratory hood or other ventilated device. OSHA, ACGIH, or NIOSH have not established occupational exposure limits for this substance. Use prudent laboratory practices for handling chemical substances of unknown toxicity.
EYE PROTECTION:	Wear splash-proof or dust-resistant safety goggles to prevent eye contact with this substance.
CLOTHING:	Wear appropriate protective clothing (laboratory coat with long sleeves) and equipment to prevent skin contact with this material.
GLOVES:	Wear appropriate protective gloves to prevent contact with this material.

9. PHYSICAL AND CHEMICAL PROPERTIES

DESCRIPTION:	Colorless, odorless liquid; may precipitate out of solution at cooler temperatures
ODOR:	odorless
PH:	6.8
MELTING POINT:	No data available
INITIAL BOILING POINT:	No data available
FLASH POINT:	The product is not flammable.
UPPER EXPLOSIVE LIMIT:	No data available
LOWER EXPLOSIVE LIMIT:	No data available
VAPOR PRESSURE:	No data available
VAPOR DENSITY:	No data available
RELATIVE DENSITY:	No data available
WATER SOLUBILITY:	Completely miscible

10. STABILITY AND REACTIVITY

REACTIVITY:	Stable under recommended storage conditions. Precipitate will form below 20°C.
CONDITIONS TO AVOID:	Heat, flames, and sparks
INCOMPATIBILITIES:	Oxidizing agents
POLYMERIZATION:	Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

TOXICITY:	The toxicological properties of this material have not been investigated. For research and development purposes only.
CARCINOGEN STATUS:	No information available
LOCAL EFFECTS:	No information available
TARGET EFFECTS:	No information available
AT INCREASED RISK FROM EXPOSURE:	No information available
CARCINOGEN/REPRODUCTIVE TOXIN STATUS	
IARC:	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by IARC.
ACGIH:	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by ACGIH.
NTP:	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by NTP.
OSHA:	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by OSHA.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL IMPACT RATING (0–4): **No data available**
ACUTE AQUATIC TOXICITY: **No data available**

DEGRADABILITY: **No data available**

LOG BIOCONCENTRATION FACTOR (BCF): **No data available**

13. DISPOSAL CONSIDERATIONS

Observe all federal, state, and local regulations.

14. TRANSPORTATION INFORMATION

DOT (US)
UN number: 1993 Class: 3 packing group: II
Proper shipping name: Flammable liquids, n.o.s. (Contains Sodium Dodecyl Sulphate).
Reportable Quantity (RQ):

15. REGULATORY INFORMATION

The toxicological properties of this material have not been investigated.

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311-312 Hazards

Acute Health Hazard

Chemical	State	CAS-No	Revision Date
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16. OTHER INFORMATION

POTENTIAL HEALTH EFFECTS:

SKIN CONTACT:	Short-term exposure:	May be harmful if absorbed through skin
	Long-term exposure:	No information available
EYE CONTACT:	Short-term exposure:	Corrosive to mucus membranes
	Long-term exposure:	No information available
INGESTION:	Short-term exposure:	Toxic if swallowed; corrosive to mucus membranes
	Long-term exposure:	No information available
INHALATION:	Short-term exposure:	May be toxic if inhaled; corrosive to mucus membranes
	Long-term exposure:	No information available
INJECTION:	Short-term exposure:	May be harmful if injected
	Long-term exposure:	No information available

THE AFOREMENTIONED INFORMATION IS BELIEVED TO BE CORRECT, BUT DOES NOT PURPORT TO BE ALL INCLUSIVE AND SHALL BE USED ONLY AS A GUIDE. INTEGRATED DNA TECHNOLOGIES SHALL NOT BE HELD LIABLE FOR ANY DAMAGE RESULTING FROM HANDLING OR FROM CONTACT WITH THE ABOVE PRODUCT.

1. PRODUCT AND COMPANY IDENTIFICATION

A. PRODUCT IDENTIFIERS

PRODUCT NAME : **xGen® 10X Wash Buffer II**
 INDEX # : **N/A**
 CAS # : **N/A**

B. DETAILS OF SUPPLIER OF THE SAFETY DATA SHEET

COMPANY : **Integrated DNA Technologies**
 : **1710 Commercial Park**
 : **Coralville, IA 52241**

 TELEPHONE : **1-800-328-2661**
 EMERGENCY PHONE # : **24-Hour Emergency Telephone:**
CHEMTREC: 1-800-424-9300

Note: CHEMTREC's emergency number is to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure, or accident involving chemicals.

C. RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE

For research and development purposes only.

2. HAZARD IDENTIFICATION

GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS

THIS PRODUCT IS CONSIDERED NON-HAZARDOUS. Per OSHA 29CFR1910.1200, Commonwealth of Australia [NOHSC: 1005, 1008(1999)], and the latest amendments to the European Union Directives 67/548/EC and 1999/45/EC, this product does not require a Material Safety Data Sheet (MSDS) or Safety Data Sheet (SDS). This product does not contain more than 1% of a component classified as hazardous and does not contain more than 0.1% of a component classified as carcinogenic. Despite the classification of certain products/components as non-hazardous, we strongly recommend using prudent laboratory practices: avoiding unnecessary contact and use of personal protective equipment, which may include gloves, eye protection, and lab coats, during the use of any laboratory reagent. IDT shall not be held liable for any damages resulting from handling or from contact with the above product.

A. PICTOGRAM: N/A
 B. SIGNAL WORD: N/A
 C. HAZARD STATEMENTS: N/A
 D. PRECAUTIONARY STATEMENTS: N/A

3. COMPOSITION/INFORMATION ON INGREDIENTS

This mixture does not contain any substances considered to be hazardous by OSHA 29 CFR 1910.1200.

4. FIRST AID MEASURES

SKIN CONTACT: **Remove contaminated clothing. Flush affected area with water and then wash with soap or mild detergent and water. Observe for signs of irritation. If irritation is present, get medical attention.**

 EYE CONTACT: **Wash eyes with large amounts of water or normal saline for at least 15 minutes. Observe for signs of irritation. If irritation is present, get medical attention.**

 INGESTION: **Get medical attention.**

 INHALATION: **Remove from exposure area to fresh air immediately. Get medical attention immediately.**

 INJECTION: **If accidentally injected, get medical attention.**

 NOTE TO PHYSICIAN: **Treat symptomatically.**

5. FIRE FIGHTING MEASURES
- Fire and Explosion Hazard: **None known to exist.**
- Fire Extinguishing Media: **Dry chemical, foam, carbon dioxide or water.**
6. ACCIDENTAL RELEASE MEASURES
- OCCUPATIONAL SPILL: **Wear appropriate protective clothing and chemically compatible gloves. Absorb with appropriate sorbent material and place spillage in appropriate container for waste disposal. Do not use combustible materials as a sorbent. Report spills to the environment of any spill materials that reach the RQ.**
- REPORTABLE QUANTITY (RQ): **Not Applicable**
7. HANDLING AND STORAGE
- Observe all federal, state and local regulations. Do not breathe dust. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Keep tightly closed. Store in a cool dry place (for prolonged storage, store at 4° C or –20°C). Use prudent laboratory practices for handling and storage of chemical substances of unknown toxicity.**
8. EXPOSURE CONTROLS/PERSONAL PROTECTION
- EXPOSURE CONTROLS: **Use in a laboratory hood or other ventilated device. OSHA, ACGIH, or NIOSH have not established occupational exposure limits for this substance. Use prudent laboratory practices for handling chemical substances of unknown toxicity.**
- EYE PROTECTION: **Wear splash-proof or dust-resistant safety goggles to prevent eye contact with this substance.**
- CLOTHING: **Wear appropriate protective clothing (laboratory coat with long sleeves) and equipment to prevent skin contact with this material.**
- GLOVES: **Wear appropriate protective gloves to prevent contact with this material.**
9. PHYSICAL AND CHEMICAL PROPERTIES
- DESCRIPTION: **Colorless, odorless liquid**
- PH: **5.9**
- MELTING POINT: **No data available**
- INITIAL BOILING POINT: **No data available**
- FLASH POINT: **The product is not flammable.**
- UPPER EXPLOSIVE LIMIT: **No data available**
- LOWER EXPLOSIVE LIMIT: **No data available**
- VAPOR PRESSURE: **No data available**
- VAPOR DENSITY: **No data available**
- RELATIVE DENSITY: **No data available**
- WATER SOLUBILITY: **Completely miscible**
10. STABILITY AND REACTIVITY
- REACTIVITY: **Stable under recommended storage conditions**
- CONDITIONS TO AVOID: **Incompatible products; excess heat; dust formation**
- INCOMPATIBILITIES: **Strong oxidizing agents**
- POLYMERIZATION: **Hazardous polymerization will not occur.**

11. TOXICOLOGICAL INFORMATION

TOXICITY:	The toxicological properties of this material have not been investigated. For research and development purposes only.
CARCINOGEN STATUS:	No information available
LOCAL EFFECTS:	No information available
TARGET EFFECTS:	No information available
AT INCREASED RISK FROM EXPOSURE:	No information available
CARCINOGEN/REPRODUCTIVE TOXIN STATUS	
IARC:	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by IARC.
ACGIH:	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by ACGIH.
NTP:	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by NTP.
OSHA:	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by OSHA.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL IMPACT RATING (0–4):	No data available
ACUTE AQUATIC TOXICITY:	No data available
DEGRADABILITY:	No data available
LOG BIOCONCENTRATION FACTOR (BCF):	No data available

13. DISPOSAL CONSIDERATIONS

Observe all federal, state, and local regulations.

14. TRANSPORTATION INFORMATION

Not Regulated

15. REGULATORY INFORMATION

The toxicological properties of this material have not been investigated.

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (*de minimis*) reporting levels established by SARA Title III, Section 313.

SARA 311-312 Hazards

This material does not contain any chemical components with known CAS numbers that exceed the threshold (*de minimis*) reporting levels established by SARA Title III, Section 311/312.

SARA 313: Right to Know Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (*de minimis*) reporting levels established by SARA Title III, Section 313.

16. OTHER INFORMATION

POTENTIAL HEALTH EFFECTS:

SKIN CONTACT:	Short-term exposure:	May be harmful if absorbed through skin
	Long-term exposure:	No information available
EYE CONTACT:	Short-term exposure:	Corrosive to mucus membranes
	Long-term exposure:	No information available
INGESTION:	Short-term exposure:	Toxic if swallowed; corrosive to mucus membranes
	Long-term exposure:	No information available
INHALATION:	Short-term exposure:	May be toxic if inhaled; corrosive to mucus membranes
	Long-term exposure:	No information available
INJECTION:	Short-term exposure:	May be harmful if injected
	Long-term exposure:	No information available

THE AFOREMENTIONED INFORMATION IS BELIEVED TO BE CORRECT, BUT DOES NOT PURPORT TO BE ALL INCLUSIVE AND SHALL BE USED ONLY AS A GUIDE. INTEGRATED DNA TECHNOLOGIES SHALL NOT BE HELD LIABLE FOR ANY DAMAGE RESULTING FROM HANDLING OR FROM CONTACT WITH THE ABOVE PRODUCT.

1. PRODUCT AND COMPANY IDENTIFICATION

A. PRODUCT IDENTIFIERS

PRODUCT NAME : **xGen® 10X Wash Buffer III**
 INDEX # : **N/A**
 CAS # : **N/A**

B. DETAILS OF SUPPLIER OF THE SAFETY DATA SHEET

COMPANY : **Integrated DNA Technologies**
 : **1710 Commercial Park**
 : **Coralville, IA 52241**
 TELEPHONE : **1-800-328-2661**
 EMERGENCY PHONE # : **24-Hour Emergency Telephone:**
CHEMTREC: 1-800-424-9300

Note: CHEMTREC's emergency number is to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure, or accident involving chemicals.

C. RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE

For research and development purposes only.

2. HAZARD IDENTIFICATION

GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS

THIS PRODUCT IS CONSIDERED NON-HAZARDOUS. Per OSHA 29CFR1910.1200, Commonwealth of Australia [NOHSC: 1005, 1008(1999)], and the latest amendments to the European Union Directives 67/548/EC and 1999/45/EC, this product does not require a Material Safety Data Sheet (MSDS) or Safety Data Sheet (SDS). This product does not contain more than 1% of a component classified as hazardous and does not contain more than 0.1% of a component classified as carcinogenic. Despite the classification of certain products/components as non-hazardous, we strongly recommend use of prudent laboratory practices: avoid unnecessary contact and use personal protective equipment, which may include gloves, eye protection, and lab coats, during the use of any laboratory reagent. IDT shall not be held liable for any damages resulting from handling or from contact with the above product.

- A. PICTOGRAM: N/A
- B. SIGNAL WORD: N/A
- C. HAZARD STATEMENTS: N/A
- D. PRECAUTIONARY STATEMENTS: N/A

3. COMPOSITION/INFORMATION ON INGREDIENTS

This mixture does not contain any substances considered to be hazardous by OSHA 29 CFR 1910.1200.

4. FIRST AID MEASURES

SKIN CONTACT: **Remove contaminated clothing. Flush affected area with water, and then wash with soap or mild detergent and water. Observe for signs of irritation. If irritation is present, get medical attention.**

EYE CONTACT: **Wash eyes with large amounts of water or normal saline for at least 15 minutes. Observe for signs of irritation. If irritation is present, get medical attention.**

INGESTION: **Get medical attention.**

INHALATION: **Remove from exposure area to fresh air immediately. Get medical attention immediately.**

INJECTION: **If accidentally injected, get medical attention.**

NOTE TO PHYSICIAN: **Treat symptomatically.**

5. FIRE FIGHTING MEASURES
 FIRE AND EXPLOSION HAZARD: **None known to exist.**
 FIRE EXTINGUISHING MEDIA: **Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.**
6. ACCIDENTAL RELEASE MEASURES
 OCCUPATIONAL SPILL: **Wear appropriate protective clothing and chemically compatible gloves. Absorb with appropriate sorbent material and place spillage in appropriate container for waste disposal. Do not use combustible materials as a sorbent. Report spills to the environment of any spill materials that reach the RQ.**
 REPORTABLE QUANTITY (RQ): **Not Applicable**
7. HANDLING AND STORAGE
Observe all federal, state, and local regulations. Do not breathe. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Keep tightly closed. Store in a cool, dry place (for prolonged storage, store at 4° C or –20°C). Use prudent laboratory practices for handling and storage of chemical substances of unknown toxicity.
8. EXPOSURE CONTROLS/PERSONAL PROTECTION
 EXPOSURE CONTROLS: **Use in a laboratory hood or other ventilated device. OSHA, ACGIH, or NIOSH have not established occupational exposure limits for this substance. Use prudent laboratory practices for handling chemical substances of unknown toxicity.**
 EYE PROTECTION: **Wear splash-proof or dust-resistant safety goggles to prevent eye contact with this substance.**
 CLOTHING: **Wear appropriate protective clothing (laboratory coat with long sleeves) and equipment to prevent skin contact with this material.**
 GLOVES: **Wear appropriate protective gloves to prevent contact with this material.**
9. PHYSICAL AND CHEMICAL PROPERTIES
 DESCRIPTION: **Colorless, odorless liquid**
 PH: **5.6**
 MELTING POINT: **No data available**
 INITIAL BOILING POINT: **No data available**
 FLASH POINT: **The product is not flammable.**
 UPPER EXPLOSIVE LIMIT: **No data available**
 LOWER EXPLOSIVE LIMIT: **No data available**
 VAPOR PRESSURE: **No data available**
 VAPOR DENSITY: **No data available**
 RELATIVE DENSITY: **No data available**
 WATER SOLUBILITY: **Completely miscible**
10. STABILITY AND REACTIVITY
 REACTIVITY: **Stable under recommended storage conditions**
 CONDITIONS TO AVOID: **Incompatible products; excess heat; dust formation**
 INCOMPATIBILITIES: **Strong oxidizing agents**
 POLYMERIZATION: **Hazardous polymerization will not occur.**

11. TOXICOLOGICAL INFORMATION

TOXICITY:	The toxicological properties of this material have not been investigated. For research and development purposes only.
CARCINOGEN STATUS:	No information available
LOCAL EFFECTS:	No information available
TARGET EFFECTS:	No information available
AT INCREASED RISK FROM EXPOSURE:	No information available
CARCINOGEN/REPRODUCTIVE TOXIN STATUS	
IARC:	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by IARC.
ACGIH:	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by ACGIH.
NTP:	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by NTP.
OSHA:	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by OSHA.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL IMPACT RATING (0-4):	No data available
ACUTE AQUATIC TOXICITY:	No data available
DEGRADABILITY:	No data available
LOG BIOCONCENTRATION FACTOR (BCF):	No data available

13. DISPOSAL CONSIDERATIONS

Observe all federal, state, and local regulations.

14. TRANSPORTATION INFORMATION

Not regulated

15. REGULATORY INFORMATION

The toxicological properties of this material have not been investigated.

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (*de minimis*) reporting levels established by SARA Title III, Section 313.

SARA 311-312 Hazards

This material does not contain any chemical components with known CAS numbers that exceed the threshold (*de minimis*) reporting levels established by SARA Title III, Section 311/312.

SARA 313: Right to Know Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (*de minimis*) reporting levels established by SARA Title III, Section 313.

16. OTHER INFORMATION

POTENTIAL HEALTH EFFECTS:

SKIN CONTACT:	Short-term exposure:	May be harmful if absorbed through skin
	Long-term exposure:	No information available
EYE CONTACT:	Short-term exposure:	Corrosive to mucus membranes
	Long-term exposure:	No information available
INGESTION:	Short-term exposure:	Toxic if swallowed; corrosive to mucus membranes
	Long-term exposure:	No information available
INHALATION:	Short-term exposure:	May be toxic if inhaled; corrosive to mucus membranes
	Long-term exposure:	No information available
INJECTION:	Short-term exposure:	May be harmful if injected
	Long-term exposure:	No information available

THE AFOREMENTIONED INFORMATION IS BELIEVED TO BE CORRECT, BUT DOES NOT PURPORT TO BE ALL-INCLUSIVE AND SHALL BE USED ONLY AS A GUIDE. INTEGRATED DNA TECHNOLOGIES SHALL NOT BE HELD LIABLE FOR ANY DAMAGE RESULTING FROM HANDLING OR FROM CONTACT WITH THE ABOVE PRODUCT.