

### 1. PRODUCT AND COMPANY IDENTIFICATION

#### A. PRODUCT IDENTIFIERS

PRODUCT NAME : **Nuclease Free Duplex Buffer**  
 SYNONYMS : **N/A**  
 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: **:NOT APPLICABLE**



II. SIGNAL WORD : **Warning**

III. HAZARD STATEMENTS :

**H 335** **May cause respiratory irritation**

IV. PRECAUTIONARY STATEMENTS: :

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

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

**P403** **Store in a well-ventilated place. Keep container tightly closed**

**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
<b>Water</b>	<b>7732-18-5</b>	<b>5-100%</b>	<b>Non-Hazardous</b>
<b>HEPES</b>	<b>7365-45-9</b>	<b>0-5%</b>	<b>Resp Irrit 3</b>

### 4. FIRST AID MEASURES

SKIN CONTACT: **Remove contaminated clothing. Wash exposed area with soap and water. If irritation persists, seek medical attention**

EYE CONTACT: **Wash eyes with plenty of water for at least 15 minutes, lifting lids occasionally. Seek medical aid.**

INGESTION: **Call a physician. Do not induce vomiting.**

INHALATION: **Remove from exposure area to fresh air immediately. If not breathing give artificial respiration. If breathing is difficult give Oxygen.**

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

NOTE TO PHYSICIAN: **There is no specific antidote. Treat symptomatically and supportively.**

5. **FIRE FIGHTING MEASURES**  
 Fire and Explosion Hazard: **N/A**  
 Fire Extinguishing Media: **For small fires use dry chemical, foam or carbon dioxide. Water may not be effective but may be used to keep containers exposed to fires cool. Wear self-contained breathing apparatus and protective suit.**
6. **ACCIDENTAL RELEASE MEASURES**  
 OCCUPATIONAL SPILL: **Absorb spill with inert material, then place in a chemical waste container. Dispose of in a manner consistent with federal, local law.**  
 REPORTABLE QUANTITY (RQ): **Ventilate the area. Wear appropriate protective clothing and chemically compatible gloves. Absorb with appropriate sorbent material and place spillage in appropriate container for disposal according to local regulations. Do not use combustible materials as a sorbent. Report spills to the environment of any spill materials that reach the RQ.**
7. **HANDLING AND STORAGE**  
**Observe all federal, state and local regulations. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Keep tightly closed. Store in a cool dry place. Use prudent laboratory practices for handling and storage of chemicals.**
8. **EXPOSURE CONTROLS/PERSONAL PROTECTIO**  
 EXPOSURE CONTROLS: **Use in a laboratory hood or other ventilated device. Use prudent laboratory practices for handling chemicals.**  
 EYE PROTECTION: **Employees should wear splash proof safety goggles to prevent eye contact with this substance.**  
 CLOTHING: **Employees should wear appropriate protective clothing and equipment to prevent skin contact with this material.**  
 GLOVES: **Employee must wear appropriate protective gloves to prevent contact with this material.**
9. **PHYSICAL AND CHEMICAL PROPERTIE**  
 DESCRIPTION: **Clear liquid.**  
 PH: **7-9**
10. **STABILITY AND REACTIVITY**  
 REACTIVITY: **Stable under recommended storage conditions**  
 CONDITIONS TO AVOID: **Avoid contact with heat, sparks, flames or other sources of ignition.**  
 INCOMPATIBILITIES: **Strong oxidizing agents, strong acids, strong bases, metals**  
 POLYMERIZATION: **N/A**
11. **TOXICOLOGICAL INFORMATION**  
 ACUTE ORAL TOXICITY: **Not Tested**  
 ACUTE DERMAL TOXICITY: **Not Tested**  
 ACUTE INHALATION TOXICITY: **Not Tested**  
 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): **N/A**  
ACUTE AQUATIC TOXICITY: **Not Tested**  
DEGRADABILITY: **No data available.**  
LOG BIOCONCENTRATION FACTOR (BCF): **No data available.**

13. DISPOSAL CONSIDERATIONS

Observe all Federal, State and Local Regulations.

14. TRANSPORTATION INFORMATION

N/A

15. REGULATORY INFORMATION

The toxicological properties of this material have not been investigated. For research and development purposes only.

**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 (HEPES)

Chemical	STATE	CAS-No	Revision Date
HEPES	Pennsylvania	7365-45-9	
	New Jersey	7365-45-9	

16. OTHER INFORMATION

POTENTIAL HEALTH EFFECTS:

SKIN CONTACT: Short Term Exposure: **May be harmful if absorbed through skin – Causes chemical burns.**  
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: **No information available**  
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.