

## MATERIAL SAFETY DATA SHEET

### ❖ 1. PRODUCT INFORMATION

**Product Name:** RapidShear Sonication Reagent  
**Product Number:** RS101-500/5000  
**Product Use:** DNA shearing sonication reagent  
**Product Category:** Sonication

### RECOMMENDED USE OF THE SONICATION REAGENT AND RESTRICTIONS ON USE

**Recommended Use:** This product is for research use only.

### DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

**Company Name:** Triangle Biotechnology, Inc.  
**Company Address:** 6 Davis Drive  
Durham, NC 27709  
**Company Phone Number:** +1 (704) 807-4118  
**Company Email:** research@trianglebio.com

**Emergency Phone Number** +1 (704) 807-4118

### ❖ 2. HAZARDOUS IDENTIFICATION

#### CLASSIFICATION

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

#### LABEL ELEMENTS

#### EMERGENCY OVERVIEW

This product contains no substances which at their given concentration, are considered to be hazardous to health.

**Color:** Clear  
**Physical State:** Liquid  
**Odor:** Odorless

#### HAZARDS NOT OTHERWISE CLASSIFIED (HNOC)

No hazards noted.

#### POTENTIAL HEALTH EFFECTS:

**Inhalation:** None reported  
**Ingestion:** None reported  
**Skin contact:** Possible mild irritation  
**Eye contact:** None reported

## OTHER INFORMATION

No data available.

## ❖ 3. COMPOSITION/INFORMATION ON INGREDIENTS

This product contains no substances which at their given concentration, are considered to be hazardous to health.

**Substance:** Sonication reagent  
**Chemical Identity:** Aqueous mixture  
**Common Name/Synonym:** Nanodroplet

Component	CAS-No	Weight %	Hazardous?
Lipid blend	Not available	<1%	Yes
Glycerine	56-81-5	<10%	Yes
Propylene glycol	57-55-6	>1%	No
Perfluorobutane	355-25-9	<1%	No
Water	7732-18-5	>50%	No
Sodium chloride	7647-14-5	<1%	No
Sodium phosphate dibasic	7558-79-4	<1%	No
Potassium phosphate monobasic	7778-77-0	<1%	No

## ❖ 4. FIRST AID MEASURES

### OVERVIEW

Not aware of any reported health hazards for this product. We recommend handling all chemicals with caution.

### GENERAL ADVICE

Immediate medical attention is required. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet is possible). Remove from exposure, lie down. Do not breathe dust/fume/gas/mist/vapors/spray.

### EYE CONTACT

Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

### SKIN CONTACT

Wash Skin with soap and water.

### INHALATION

Remove to fresh air.

### INGESTION

Clean mouth with water and drink afterwards plenty of water.

### MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AN DELAYED

No information available.

### INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

**Note to Physicians:** Treat symptomatically.

## ❖ 5. FIRE-FIGHTING MEASURES

### **SUITABLE EXTINGUISHING MEDIA**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

### **UNSUITABLE EXTINGUISHING MEDIA**

CAUTION: Use of water spray when fighting fire may be inefficient.

### **SPECIFIC HAZARDS ARISING FROM THE CONTRAST AGENT**

No information available.

### **PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## ❖ 6. ACCIDENTAL RELEASE MEASURES

### **PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT, AND EMERGENCY PROCEDURES**

#### **Personal Precautions:**

Ensure adequate ventilation, especially in confined areas.

#### **Personal Protective Equipment (PPE):**

Use personal protective equipment. Examples included tightly fitting safety goggles, lab coat, and impervious gloves. See Section 8 for more information.

### **ENVIRONMENTAL PRECAUTIONS**

Prevent release to drains and waterways. Prevent release to the environment. See Section 12 for additional Ecological Information.

### **METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING-UP**

Contain spillage, and then collect with non-combustible absorbent material (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local/national regulations.

### **METHODS FOR CLEANING UP**

Contain and collect spillage and place in container for disposal according to local regulations. Handle waste materials, including gloves, protective clothing, contaminated spill cleanup material, etc., as appropriate for chemically and pharmacologically similar items.

## ❖ 7. HANDLING AND STORAGE

### **HANDLING PRECAUTIONS**

Avoid exposure. Avoid inhalation of vapor or mist. Keep away from heat or sources of ignition. Prevent release to drains and waterways. (For a complete discussion of Handling and Storage information, please consult the product insert).

### **STORAGE CONDITIONS**

Keep frozen preferably at -80 °C, or also at -20 °C.

### **CONTAINER REQUIREMENTS**

Store in original container or in certified tubes. Store in glass or chemically resistant plastic vials. Keep away from heat, sparks, and flames.

## ❖ 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limit(s)	Company Guideline	ACGIH	OSHA	NIOSH
RapidShear Sonication Reagent	---	---	---	---
Glycerol	---	---	10 mg/m <sup>3</sup> Total 5 mg/m <sup>3</sup> Respirable	---
Propylene Glycol	---	---	---	---

### **EXPOSURE CONTROL BANDING**

No information available.

### **TRIANGLE BIOTECHONLOGY EXPOSURE GUIDELINES SUMMARY**

No information available.

### **RECOMMENDED INDUSTRIAL HYGIENE MONITORING METHODS**

Refer to any applicable NIOSH, OSHA, or ASTM methods.

### **ENGINEERING CONTROLS AND VENTILATION**

When handling small quantities in a clinical setting, good room ventilation is desirable. Specific engineering controls should not be needed. When handling larger quantities, such as in a manufacturing setting, ensure worker exposure is below the recommended exposure limit. If significant aerosol (mist) is generated, use process enclosures, containment technology, or other engineering controls to keep the airborne levels below recommended exposure limit.

### **RESPIRATORY PROTECTION**

Respiratory protection is not required for normal use of this material. If the occupational exposure control limit (ECL) is exceeded, wear an appropriate respirator with a protection factor sufficient to control exposures to below the ECL.

### **EYE PROTECTION**

Follow good chemical hygiene practices when using clinical or consumer presentations. Safety glasses or goggles are recommended if eye contact is possible.

### **HAND PROTECTION**

Follow good chemical hygiene practices when using clinical or consumer presentations. Wear protective gloves when working with large quantities.

### **SKIN AND BODY PROTECTION**

Follow good chemical hygiene practices when using clinical or consumer presentations. It is recommended that a laboratory coat or other chemical protective garment is worn when handling this product.

### **HYGIENE**

Wash hands and face before breaks and immediately after handling this product.

## ❖ 9. PHYSICAL AND CHEMICAL PROPERTIES

### APPEARANCE

**Color:** Clear  
**Physical State:** Liquid  
**Odor:** Odorless

### PHYSICAL AND CHEMICAL PROPERTIES

**Molecular Weight:** Not available  
**Solubility:** Soluble  
**Flashpoint:** >93° C  
**Density:** Not available  
**pH:** 6.2-8.0  
**Boiling Point:** Not available  
**Freezing Point:** -15° C  
**Melting Point:** Not available  
**Vapor Density:** Not available  
**Vapor Pressure:** Not available

## ❖ 10. STABILITY AND REACTIVITY

### REACTIVITY

No data available.

### CHEMICAL STABILITY

Stable under normal conditions. Foaming may occur at >30 °C.

### POSSIBILITY OF HAZARDOUS REACTIONS

None known. Stable under normal conditions. Hazardous polymerization does not occur.

### CONDITIONS TO AVOID

Incompatible materials. Ignition sources. Heat.

### INCOMPATIBLE MATERIALS

No data available.

### HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous decomposition products formed under fire conditions: Carbon oxides, nitrogen oxides (NOx).

## ❖ 11. TOXICOLOGY INFORMATION

### EYE CONTACT

RapidShear Sonication Reagent not irritating to eyes.

### SKIN CONTACT

RapidShear Sonication Reagent possible mild skin irritant.

### INHALATION

No data available.

### INGESTION

No data available.

## INFORMATION ON TOXICOLOGICAL EFFECTS

**Symptoms:** No information available

## DELAYED AND IMMEDIATE EFFECTS AS WELL AS CHRONIC EFFECTS FROM SHORT AND LONG-TERM EXPOSURE

<b>Skin Corrosion/Irritation:</b>	Mild
<b>Serious Eye Damage/Eye Irritation:</b>	No information available
<b>Irritation:</b>	No information available
<b>Corrosivity:</b>	No information available
<b>Sensitization:</b>	
<b>Skin:</b>	No information available
<b>Respiratory:</b>	No information available
<b>Germ cell mutagenicity:</b>	No information available
<b>Carcinogenicity:</b>	No information available
<b>Reproductive Toxicity:</b>	No information available
<b>Developmental Toxicity:</b>	No information available
<b>Teratogenicity:</b>	No information available
<b>STOT – single exposure:</b>	No information available
<b>STOT – repeated exposure:</b>	No information available
<b>Chronic Toxicity:</b>	No information available
<b>Subchronic Toxicity:</b>	No information available
<b>Target Organ Effects:</b>	No information available
<b>Neurological Effects:</b>	No information available
<b>Other Adverse Effects:</b>	No information available
<b>Aspiration Hazard:</b>	No information available

## ❖ 12. ECOLOGICAL INFORMATION

### ENVIRONMENTAL FATE

No information available

### ENVIRONMENTAL TOXICITY

No information available

## ❖ 13. DISPOSAL CONSIDERATIONS

### ADVICE ON DISPOSAL AND PACKAGING

Disposal should be in accordance with applicable regional, national, and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

## ❖ 14. TRANSPORT INFORMATION

### DOT

Not regulated

## ❖ 15. REGULATORY INFORMATION

### INTERNATIONAL INVENTORIES

**TSCA:** Complies

### *US FEDERAL REGULATIONS:*



**CWA (CLEAN WATER ACT)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**

This material as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

**US STATE REGULATIONS:**

**CALIFORNIA PROPOSITION 65**

This product does not contain any Proposition 65 chemicals.

**US RIGHT TO KNOW REGULATIONS**

**US EPA LABEL INFORMATION**

EPA Pesticide Registration Number: Not applicable

**❖ 16. OTHER INFORMATION**

MSDS Preparation Information

Prepared by: Triangle Biotechnology, Inc.  
Last edited: 05/03/2021

**DISCLAIMER**

**IMPORTANT:** The information in this SDS is provided in good faith based on our knowledge as of the issue date (or subsequent revision date, if any), and is to be used only as a guide. This SDS does not constitute a guarantee (express or implied) of any kind and we make no warranties or merchantability of fitness for a particular purpose. This information relates only to the designated product as shipped and may not be valid if the product is used in combination with any other materials or is not used in accordance with our instructions. It is the responsibility of the buyer/user to ensure that its activities comply with all applicable governmental requirements. Since conditions of use of the product are not under the control of Triangle Biotechnology, it is the duty of the buyer/user to determine the necessary conditions for the safe use of the product. Triangle Biotechnology will not be liable for any damages resulting from handling or contact with the product

**END OF SAFETY DATA SHEET**