

# Bioland Scientific LLC

## Material Safety Data Sheet

Version 1.0  
Revision Date 13/06/2018  
Print Date 13/06/2018

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name	2X Reaction Mix
Product Number	FS02
Brand	Bioland Scientific LLC
Company	Bioland Scientific LLC 14925 Paramount Blvd., Suite C Paramount, CA 90723 USA
Telephone	1-562-377-2668
Fax	1-562-733-6008
Emergency Phone #	1-562-377-2668

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

The product contains no substances which at their given concentration, are considered to be hazardous to health. We recommend handling all chemicals with caution.

### 3. HAZARDS IDENTIFICATION

#### GHS-Classification

#### Signal Word

Not Hazardous

#### Health Hazard

Not Hazardous

#### Physical Hazards

Not Hazardous

#### Principle Routes of Exposure/Potential Health Effects

Eyes: May cause eye irritation with susceptible persons.

Skin: May cause skin irritation in susceptible persons.

Inhalation: May be harmful by inhalation.

Ingestion: May be harmful if swallowed.

#### Specific Effects

Carcinogenic Effects: None

Mutagenic Effects: None

Reproductive Toxicity: None

Sensitization: None

**Target Organ Effects:** No known effects under normal use conditions.

HMIS

Health	0
Flammability	0
Reactivity	0

**Section 3 - Composition/Information on Ingredient**

The product contains no substances which at their given concentration, are considered to be hazardous to health. We recommend handling all chemicals with caution.

#### 4. FIRST AID MEASURES

**Eye contact**

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**Skin contact**

Wash off with soap and plenty of water. Consult a physician.

**Inhalation**

If breathed in, move person into fresh air. If not breathing give artificial respiration. Consult a physician.

**Ingestion**

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**Notes to physician**

Treat symptomatically.

#### 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media**

Water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Special protective equipment for fire-fighters**

Wear self-contained breathing apparatus for fire fighting if necessary.

**Unusual Fire and Explosions Hazard(s)**

N/A

**Flash Point:**

N/A

**Autoignition Temp:**

N/A

**Flammability:**

N/A

#### 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions**

Exercise appropriate precautions to minimize direct contact with skin or eyes and prevent inhalation of vapors. Wear disposable coveralls and discard them after use.

**Methods for Cleaning-up**

Soak up with inert absorbing materials and place in a closed container for disposal. Ventilate area and wash spill site after material pickup is complete.

**Environmental Precautions**

Prevent further leakage or spillage if safe to do so. See Section 12 for additional information.

## 7. HANDLING AND STORAGE

### Handling

Always wear recommended Personal Protective Equipment. No special handling required.

### Storage

Keep cap tightly closed. Store at -20°C.

## 8.EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Limits

We are not aware of any national exposure limit

### Engineering Measures

Ensure adequate ventilation, especially in confined areas.

### Personal Protective Equipment

Personal Protective Equipment requirements are dependent of the user institution's risk assessment, and are specific to the risk assessment for each laboratory where this material may be used.

### Respiratory Protection

Wear Suitable respiratory equipment if ventilation is insufficient.

**Hand:** Compatible chemical-resistant gloves.

**Eye:** Compatible safety goggles.

**Skin and body protection:** Lightweight protective clothing.

**Hygiene measures:** Handle in accordance with good industrial hygiene and safety practice.

### Environmental Exposure Controls:

Prevent product entering drains

## 9.PHYSICAL AND CHEMICAL PROPERTIES

### General Physical Properties

Form	Liquid
Appearance	Colorless
Odor	Mild
Boiling Point/Range	oC no data available oF no data available
Melting Point/Range	oC no data available oF no data available
Flash Point	oC no data available oF no data available
Auto-ignition Temperature	oC no data available oF no data available
Oxidizing Properties	No information available
Solubility	No information available
pH Range	No information available

## 10.STABILITY AND REACTIVITY

<b>Stability</b>	Stable under normal conditions.
<b>Materials to Avoid</b>	No dangerous reaction known under normal conditions.
<b>Hazardous Decomposition Products</b>	None under normal conditions.
<b>Hazardous Polymerization</b>	Does not occur.

## 11.TOXICOLOGICAL INFORMATION

**Acute Toxicity**      No information available

### **Principle Route of Exposure/Potential Health Effects**

**Eye:** May cause eye irritation with susceptible persons.

**Skin:** May cause skin irritation in susceptible persons.

**Inhalation:** May be harmful by inhalation.

**Ingestion:** May be harmful if swallowed.

**Carcinogenic:** Effects None

**Mutagenic:** Effects None

**Reproductive Toxicity:** None

**Sensitization:** None

**Target Organ Effects:** No known target organ effects.

## 12.ECOLOGICAL INFORMATION

<b>Ecotoxicity Effects</b>	No information available.
<b>Mobility</b>	No information available.
<b>Biodegradation</b>	Inherently biodegradable.
<b>Bioaccumulation</b>	Does not bioaccumulate.

## 13.DISPOSAL CONSIDERATIONS

Dispose of in accordance with local regulations.

## 14.TRANSPORTATION INFORMATION

### **IATA**

Proper Shipping Name	Not classified as dangerous under the transport regulations.
Hazard Class	None
Subsidiary Class	None
Packing Group	None
Un-No	None

## 15.REGULATORY INFORMATION

### U.S. Federal Regulations

#### **SARA 313**

Not Regulated by SARA.

#### **Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs)**

Contains no HAPs.

### U.S. State Regulations

#### **California Proposition 65**

Contains no chemical listed under Proposition 65

### Canadian Regulations

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by CPR.

#### **WHMIS Hazard Class**

Not controlled.

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

## 16.OTHER INFORMATION

### **Disclaimer:**

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**Bioland Scientific LLC provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose. BIOLAND SCIENTIFIC LLC MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE INFORMATION SET FORTH HEREIN OR THE PRODUCT TO WHICH THE INFORMATION REFERS. ACCORDINGLY, BIOLAND SCIENTIFIC LLC WILL NOT BE RESPONSIBLE FOR DAMAGES RESULTING FROM USE OF OR RELIANCE UPON THIS INFORMATION.**

# Bioland Scientific LLC

## Material Safety Data Sheet

Version 1.0  
Revision Date 13/06/2018  
Print Date 13/06/2018

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name	Nuclease-Free H <sub>2</sub> O
Product Number	FS02
Brand	Bioland Scientific LLC
Company	Bioland Scientific LLC 14925 Paramount Blvd., Suite C Paramount, CA 90723 USA
Telephone	1-562-377-2668
Fax	1-562-733-6008
Emergency Phone #	1-562-377-2668

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

The product contains no substances which at their given concentration, are considered to be hazardous to health. We recommend handling all chemicals with caution.

### 3. HAZARDS IDENTIFICATION

#### GHS-Classification

#### Signal Word

Not Hazardous

#### Health Hazard

Not Hazardous

#### Physical Hazards

Not Hazardous

#### Principle Routes of Exposure/Potential Health Effects

**Eyes:** Non-irritating to eyes.

**Skin:** Non-irritating to skin.

**Inhalation:** No hazard expected from normal use.

**Ingestion:** No hazard expected from normal use.

#### Specific Effects

Carcinogenic Effects: None

Mutagenic Effects: None

Reproductive Toxicity: None

Sensitization: None

**Target Organ Effects:** No known effects under normal use conditions.

HMIS

Health	0
Flammability	0
Reactivity	0

**Section 3 - Composition/Information on Ingredient**

The product contains no substances which at their given concentration, are considered to be hazardous to health. We recommend handling all chemicals with caution.

#### 4. FIRST AID MEASURES

**Eye contact**

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**Skin contact**

Wash off with soap and plenty of water. Consult a physician.

**Inhalation**

If breathed in, move person into fresh air. If not breathing give artificial respiration. Consult a physician.

**Ingestion**

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**Notes to physician**

Treat symptomatically.

#### 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media**

Material will not burn

**Special protective equipment for fire-fighters**

None

**Unusual Fire and Explosions Hazard(s)**

N/A

**Flash Point:**

N/A

**Autoignition Temp:**

N/A

**Flammability:**

N/A

#### 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions**

Exercise appropriate precautions to minimize direct contact with skin or eyes and prevent inhalation of vapors. Wear disposable coveralls and discard them after use.

**Methods for Cleaning-up**

Soak up with inert absorbing materials and place in a closed container for disposal. Ventilate area and wash spill site after material pickup is complete.

**Environmental Precautions**

Prevent further leakage or spillage if safe to do so. See Section 12 for additional information.

## 7. HANDLING AND STORAGE

### Handling

Always wear recommended Personal Protective Equipment. No special handling required.

### Storage

Keep cap tightly closed. No special storage required

## 8.EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Limits

No known exposure limits.

### Engineering Measures

Ensure adequate ventilation, especially in confined areas.

### Personal Protective Equipment

Personal Protective Equipment requirements are dependent of the user institution's risk assessment, and are specific to the risk assessment for each laboratory where this material may be used.

### Respiratory Protection

Wear Suitable respiratory equipment if ventilation is insufficient.

**Hand:** Compatible chemical-resistant gloves.

**Eye:** Compatible safety goggles.

**Skin** and body protection: Lightweight protective clothing.

**Hygiene measures:** Handle in accordance with good industrial hygiene and safety practice.

### Environmental Exposure Controls

## 9.PHYSICAL AND CHEMICAL PROPERTIES

### General Physical Properties

Form	Liquid
Appearance	Colorless
Odor	Odorless
Boiling Point/Range	100°C
Melting Point/Range	0°C
Flash Point	No information available
Auto-ignition Temperature	No information available
Oxidizing Properties	No information available
Solubility	No information available
pH Range	No information available



## 10.STABILITY AND REACTIVITY

<b>Stability</b>	Stable
<b>Materials to Avoid</b>	None under normal conditions
<b>Hazardous Decomposition Products</b>	None under normal conditions.
<b>Hazardous Polymerization</b>	Does not occur.

## 11.TOXICOLOGICAL INFORMATION

**Acute Toxicity**      Not Hazardous

### **Principle Route of Exposure/Potential Health Effects**

**Eye:** None

**Skin:** None

**Inhalation:** Not expected under normal use conditions

**Ingestion:** Not expected under normal use conditions

**Carcinogenic Effects:** None

**Mutagenic Effects:** None

**Reproductive Toxicity:** None

**Sensitization:** None

**Target Organ Effects:** No known effects under normal use conditions.

## 12.ECOLOGICAL INFORMATION

<b>Ecotoxicity Effects</b>	No information available.
<b>Mobility</b>	No information available.
<b>Biodegradation</b>	Inherently biodegradable.
<b>Bioaccumulation</b>	Does not bioaccumulate.

## 13.DISPOSAL CONSIDERATIONS

Dispose of in accordance with local regulations.

## 14.TRANSPORTATION INFORMATION

### **IATA**

Proper Shipping Name	Not classified as dangerous under the transport regulations.
Hazard Class	None
Subsidiary Class	None
Packing Group	None
Un-No	None

## 15.REGULATORY INFORMATION

### U.S. Federal Regulations

#### **SARA 313**

Not Regulated by SARA.

#### **Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs)**

Contains no HAPs.

### U.S. State Regulations

#### **California Proposition 65**

Contains no chemical listed under Proposition 65

### Canadian Regulations

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by CPR.

#### **WHMIS Hazard Class**

Not controlled.

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

## 16.OTHER INFORMATION

### **Disclaimer:**

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# Bioland Scientific LLC

## Material Safety Data Sheet

Version 1.0  
Revision Date 13/06/2018  
Print Date 13/06/2018

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name            Reverse Transcriptase Plus

Product Number        FS02  
Brand                    Bioland Scientific LLC

Company                Bioland Scientific LLC  
                              14925 Paramount Blvd., Suite C  
                              Paramount, CA 90723  
                              USA

Telephone              1-562-377-2668  
Fax                      1-562-733-6008  
Emergency Phone #    1-562-377-2668

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	EINECS-No	Weight %
Glycerol	56-81-5	200-289-5	30-60

The product contains no substances which at their given concentration, are considered to be hazardous to health. We recommend handling all chemicals with caution.

### 3. HAZARDS IDENTIFICATION

#### GHS-Classification

#### Signal Word

Not Hazardous

#### Health Hazard

Not Hazardous

#### Physical Hazards

Not Hazardous

#### Principle Routes of Exposure/Potential Health Effects

**Eyes:** May cause eye irritation with susceptible persons.

**Skin:** May cause skin irritation in susceptible persons.

**Inhalation:** May be harmful by inhalation.

**Ingestion:** May be harmful if swallowed.

#### Specific Effects

Carcinogenic Effects: None

Mutagenic Effects: None

Reproductive Toxicity: None

Sensitization: None

**Target Organ Effects:** No known effects under normal use conditions.

HMIS

Health	0
Flammability	0
Reactivity	0

#### 4. FIRST AID MEASURES

**Eye contact**

Rinse thoroughly with plenty of water for at least 15minutes and consult a physician.

**Skin contact**

Wash off with soap and plenty of water. Consult a physician.

**Inhalation**

If breathed in, move person into fresh air. If not breathing give artificial respiration Consult a physician.

**Ingestion**

Rinse mouth with water. Consult a physician.

**Notes to physician**

Treat symptomatically.

#### 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media**

Water spray, alcohol-resistant foam, dry chemical or carbon dioxide

**Special protective equipment for fire-fighters**

Wear self contained breathing apparatus for fire fighting if necessary

**Unusual Fire and Explosions Hazard(s)**

N/A

**Flash Point:**

N/A

**Autoignition Temp:**

N/A

**Flammability:**

N/A

#### 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions**

Exercise appropriate precautions to minimize direct contact with skin or eyes and prevent inhalation of vapors. Wear disposable coveralls and discard them after use.

**Methods for Cleaning-up**

Soak up with inert absorbing materials and lace in a closed container for disposal. Ventilate area and wash spill site after material pickup is complete.

**Environmental Precautions**

Prevent further leakage or spillage if safe to do so. See Section 12 for additional information.

## 7. HANDLING AND STORAGE

### Handling

Always wear recommended Personal Protective Equipment. No special handling required.

### Storage

Keep cap tightly closed. Store at -20°C.

## 8.EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Limits

Chemical Name	OSHA PEL	OSHA PEL (Ceiling)	ACGIH OEL	ACGIH OEL
Glycerol 56-81-5	15 mg/m3	-	-	-

### Engineering Measures

Ensure adequate ventilation, especially in confined areas.

### Personal Protective Equipment

Personal Protective Equipment requirements are dependent of the user institution's risk assessment, and are specific to the risk assessment for each laboratory where this material may be used.

**Respiratory Protection:** Wear Suitable respiratory equipment if ventilation is insufficient.

**Hand:** Compatible chemical-resistant gloves.

**Eye:** Compatible safety goggles.

**Skin and body protection:** Lightweight protective clothing.

**Hygiene measures:** Handle in accordance with good industrial hygiene and safety practice.

### Environmental Exposure Controls

Prevent Product entering drains

## 9.PHYSICAL AND CHEMICAL PROPERTIES

### General Physical Properties

Form	Liquid	
Appearance	Colorless	
Odor	Mild	
Boiling Point/Range	oC no data available	oF no data available
Melting Point/Range	oC no data available	oF no data available
Flash Point	oC no data available	oF no data available
Auto-ignition Temperature	oC no data available	oF no data available
Oxidizing Properties	No information available	
Solubility	No information available	
pH Range	No information available	

## 10.STABILITY AND REACTIVITY

<b>Stability</b>	Stable under normal conditions.
<b>Materials to Avoid</b>	No dangerous reaction known under normal conditions.
<b>Hazardous Decomposition Products</b>	None under normal conditions.
<b>Hazardous Polymerization</b>	Does not occur.

## 11.TOXICOLOGICAL INFORMATION

**Acute Toxicity** No information available

Chemical Name	LD (oral, rat/mouse)	LD50 (dermal, rat/rabbit)	LC50 (inhalation, rat/mouse)
Glycerol	= 12600 mg/kg	No data available	No data available

### **Principle Route of Exposure/Potential Health Effects**

<b>Eye</b>	May cause eye irritation with susceptible persons.
<b>Skin</b>	May cause skin irritation in susceptible persons.
<b>Inhalation</b>	May be harmful by inhalation.
<b>Ingestion</b>	May be harmful if swallowed.

<b>Carcinogenic Effects</b>	None
<b>Mutagenic Effects</b>	None
<b>Reproductive Toxicity</b>	None
<b>Sensitization</b>	None

**Target Organ Effects** No known effects under normal use conditions.

## 12.ECOLOGICAL INFORMATION

<b>Ecotoxicity Effects</b>	Daphnia magna (Water Flea).
<b>Mobility</b>	see log Pow.
<b>Biodegradation</b>	Inherently biodegradable.
<b>Bioaccumulation</b>	Does not bioaccumulate.

Chemical Name	Freshwater Algae Data	Water Flea Data	Freshwater Fish Species Data	Microtox Data	Log Pow
Glycerol 56-81-5	-	Daphnia magna EC50>500mg/L (24h)	-	-	logPow-1.76

## 13.DISPOSAL CONSIDERATIONS

Dispose of in accordance with local regulations.

**14. TRANSPORTATION INFORMATION****IATA**

Proper Shipping Name	Not classified as dangerous under the transport regulations.
Hazard Class	None
Subsidiary Class	None
Packing Group	None
Un-No	None

**15. REGULATORY INFORMATION**

Component	TSCA
Glycerol 56-81-5 (30-60)	Listed

**U.S. Federal Regulations****SARA 313**

Not Regulated by SARA.

**Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs)**

Contains no HAPs.

**U.S. State Regulations**

Chemical Name	Massachusetts-RTK	New Jersey-RTK	Pennsylvania-RTK	Illinois-RTK	Rhode Island-RTK
Glycerol	Listed	-	Listed	-	Listed

**California Proposition 65**

Contains no chemical listed under Proposition 65

**Canadian Regulations**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by CPR.

**WHMIS Hazard Class**

Not controlled.

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

## 16.OTHER INFORMATION

### Disclaimer:

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