

### **SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

Product Name . PCR1 Rxn Mix

Manufacturer's or suppliers details

Company . iRepertoire, Inc.

601 Genome Way

Suite 3005

Huntsville, Alabama 35806 USA

Telephone Number . 1 (256) 327-0948

Email Address . <u>info@irepertoire.com</u>

Recommended use of the chemicals and restrictions on use

Recommended use . Laboratory chemicals

### **SECTION 2. HAZARDS**

# **GHS Classification**

Not a hazardous substance or mixture.

### **GHS Label element**

Not a hazardous substance or mixture.

# **Potential Health Effects**

Aggravated Medical: None Known.

Condition

Symptoms of Overexposure: No information available.

### Caricinogenicity:

No ingredient of this product present at levels greater than

or equal to 0.1% is identified as probable, possible or

confirmed human carcinogen by IARC.

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**ACGIH** No ingredient of this product present at levels greater than

or equal to 0.1% is identified as a carcinogen or potential

carcinogen by ACGIH.

No ingredient of this product present at levels greater than **OSHA** 

or equal to 0.1% is identified as a carcinogen or potential

carcinogen by OSHA.

No ingredient of this product present at levels greater than **NTP** 

or equal to 0.1% is identified as a known or anticipated

carcinogen by NTP.

# **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance/Mixture Mixture

#### **Hazardous ingredients**

Chemical Name	CAS-No.	Concentration [%]
Tris(hydroxymethyl)aminomethane	77-86-1	>= 1- < 5
glycerol	56-81-5	>= 50 - <70

# **SECTION 4. FIRST MEASURES**

General advice Show this material safety data sheet to the doctor in

attendance.

If inhaled Move to fresh air. If symptoms persist, call a physician.

Wash off immediately with soap and plenty of water while In case of skin contact

removing all contaminated clothes and shoes. If symptoms

persist, call a physician.

In case of eye contact Remove contact lenses. Protect unharmed eye.

Rinse thoroughly with plenty of water for at least 15 minutes

and consult a physician.

If swallowed If accidentally swallowed obtain immediate medical

attention. Rinse mouth with water. Never give anything by

mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed No information available.

No information available. Notes to physician

### **SECTION 5. FIRE-FIGHTING MEASURES**

Use extinguishing measures that are appropriate to local Suitable extinguishing media

circumstances and the surrounding environment.

Specific hazards during fire fighting Exposure to decomposition products may be a hazard to

health.

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Hazardous combustion No hazardous combustion products are known

products

Specific extinguishing methods

Further Information In the event of fire and/or explosion do not breathe fumes.

Special protective equipment for fire-fighters

Wear self-contained breathing apparatus for firefighting if

necessary.

**SECTION 6. ACCIDENTAL RELEASE MEASURES** 

Personal precautions, protective equipment and emergency

Use personal protective equipment.

procedures

Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.

Environmental precautions

Prevent further leakage or spillage if safe to do so.

Methods and materials for containment and cleaning up

Keep in suitable, closed containers for disposal.

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**SECTION 7. HANDLING AND STORAGE** 

Advice on safe handling : For personal protection see section 8.

Smoking, eating and drinking should be prohibited in the

application area.

Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated

place.

Materials to avoid : Do not store near acids.

### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

### Personal protective equipment

Hand Protection

Remarks : The choice of an appropriate glove does not only

depend on its material but also on other quality features and is different from one producer to the other. Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions

(mechanical strain, duration of contact).

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Eye protection Safety Glasses

Choose body protection according to the amount Skin and body protection

and concentration of the dangerous substance at

the work place. Footwear protecting against

chemicals recommended.

No data available

not determined

Keep away from food and drink. Wash hands before breaks Hygiene measures

and at the end of workday. Ensure adequate ventilation, especially in confined areas. Avoid contact with the skin and

the eyes. When using do not eat, drink or smoke.

#### **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance liquid

Color colorless

Odor characteristic

Odor Threshold No data available

8.7 рΗ

Melting point/range No data available

Boiling point/boiling range No data available

Flash point Evaporation rate No data available

Burning rate No data available

Upper explosion limit No data available

Lower explosion limit No data available

Vapor Pressure No data available

Relative vapor density No data available

Relative density No data available

Denisty 1.06 g/cm3

Solubility(ies)

Autoignition temperature

Water solubility No data available

No data available Solubility in other solvents

No data available Partition coefficient: n-octanol/water

Thermal decomposition No data available

Viscosity, dynamic No data available

Viscosity, kinematic No data available

Explosive properties Not applicable

No data available Oxidizing properties

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### **SECTION 10. STABILITY AND REACTIVITY**

Reactivity : No decomposition if stored and applied as directed.

Chemical stability : No decomposition if stored and applied as directed.

Possibility of hazardous reactions : Stable under recommended storage conditions.

Hazardous decomposition products formed under fire

conditions

Keep away from oxidizing agents, and acidic or alkaline

products.

Conditions to avoid : No data available

Incompatible materials : No data available

Hazardous decomposition products : No decomposition if stored and applied as directed.

### **SECTION 11. TOXOLOGICAL INFORMATION**

### **Acute toxicity**

**Product** 

Acute oral toxicity : No data available

Acute inhalation toxicity : No data available

Acute dermal toxicity : No data available

**Ingredients:** 

Tris(hydroxymethyl)aminomethane

Acute oral toxicity:LD50 Oral Rat: 5,900 mg/kgAcute dermal toxicity:LD50 Rat: > 5,000 mg/kg

Method: OECD Test Guideline 402

Skin corrosion/irritation

**Product** 

May cause skin irritation and/or dermatitis

Serious eye damage/eye irritation

**Product** 

Remarks:

May irritate eyes.

Respiratory or skin sensitization

No data availability

Germ cell mutagenicity

No data availability

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# Carcinogenicity

No data available

### Reproductive toxicity

No data available

# **STOT-single exposure**

No data available

# STOT-repeated exposure

No data available

# **Aspiration toxicity**

No data available

# **Further information**

No data available

### **SECTION 12. ECOLOGICAL INFORMATION**

# **Ecotoxicity**

### **Product**

Toxicity to fish : No data available

Toxicity to algae : No data available

Toxicity to bacteria : No data available

# **Ingredients:**

### Tris(hydroxymethyl)aminomethane

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia): 980 mg/l

Exposure time: 48 h

# Persistance and degradability

No data available

# **Bioaccumulative potential**

### **Product**

Bioaccumulation : No data available

Partition coefficient: n-octanol/water : No data available

# Mobility in soil

No data available

### Other adverse effects

No data available

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### **SECTION 13. DISPOSAL CONSIDERATIONS**

### **Disposal methods**

Waste from residues Send to a licensed waste management company. Dispose of as hazardous waste in compliance with local and national

regulations.

Contaminated packaging Dispose of as unused product. Do not re-use empty

containers.

#### **SECTION 14. TRANSPORT INFORMATION**

### **UNRTDG**

Not regulated as a dangerous good

#### IATA-DGR

Not regulated as a dangerous good

### **IMDG-Code**

Not regulated as a dangerous good

# Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No data available

### **Domestic regulation**

### **49 CFR**

Not regulated as a dangerous good.

# **Special precautions for user:**

Remarks Not classified as dangerous in the meaning of transport

regulations

# **SECTION 15. REGULATORY INFORMATION**

Severe skin irritant, Severe eye irritant, Severe respiratory irritant **OSHA Hazards** 

# **EPCRA-Emergency Planning and Community Right-to-Know**

Ingredients	CAS-No.	Component RQ (lbs)
hydrogen chloride	7647-01-0	5000

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### **SARA 304 Extremely Hazardous Substance Reportable Quantity**

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : No SARA Hazards

SARA 302 . No chemicals in this material are subject to the reporting

requirements of SARA Title III, Section 302

**SARA 313** 

Not regulated as a dangerous good. : 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.

#### **Clean Air Act**

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61). This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F). This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489).

### **Clean Water Act**

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

### **US Stat Regulations**

Massachusetts Right to Know

No components are subject to the Massachusetts Right to Know

Act.

### Pennsylvania Right to Know

water	7732-18-5
Betaine monohydrate	590-47-6
ammonium sulphate	7783-20-2
dCTP disodium	102783-51-7
dATP	Not Assigned
dGTP	Not Assigned
dUTP	Not Assigned

# New Jersey Right to Know

water	7732-18-5
Betaine monohydrate	590-47-6
ammonium sulphate	7783-20-2
dCTP disodium	102783-51-7
dATP	Not Assigned
dGTP	Not Assigned
dUTP	Not Assigned

California Prop 65 This product does not contain any of California to cause cancer,

birth, or any other reproductive defects.

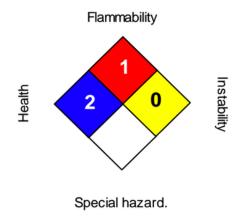
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### **SECTION 16. OTHER INFORMATION**

### **Further Information**

### NFPA:



The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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