SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: PCR 2 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: info@irepertoire.com

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.

Carcinogenicity:

IARC

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.
SAFETY DATA SHEET

iRepertoire, Inc.

iR-Profile Reagent Kit: PCR 2 Reaction Mix

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.

OSHA
No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP
No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Other Hazard
Sodium azide forms explosive compounds with heavy metals. This product contains concentrations of azide <0.1% (w/w) which with repeated contact with lead and copper commonly found in plumbing drains may result in the build up of shock sensitive compounds.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Substance/Mixture</th>
<th>Mixture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazardous ingredients</td>
<td>No hazardous ingredients</td>
</tr>
</tbody>
</table>

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.

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

Notes to physician
No information available.

SECTION 5. FIRE-FIGHTING MEASURES

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

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

Hazardous combustion products
No hazardous combustion products are known.
Specific extinguishing methods

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

Further Information

Wear self-contained breathing apparatus for firefighting if necessary.

Special protective equipment for fire-fighters

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment.

Methods and materials for containment and cleaning up

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

Keep in suitable, closed containers for disposal.

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.

SECTION 8. EXPOSURE CONTROLS/PERSOAL 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).

Eye protection

Safety Glasses

Skin and body protection

Choose body protection according to the amount and concentration of the dangerous substance at the work place. Footwear protecting against chemicals recommended.

Hygiene measures

Keep away from food and drink. When using do not eat, drink, or smoke.
SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid
Color : No data available
Odor : characteristic
Odor Threshold : No data available
pH : No data available
Melting point/range : No data available
Boiling point/boiling range : No data available
Flash point : No data available
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
Density : No data available
Solubility(ies)
Water solubility : No data available
Solubility in other solvents : No data available
Partition coefficient: n-octanol/water : No data available
Autoignition temperature : not determined
Thermal decomposition : No data available
Viscosity : No data available
Viscosity, dynamic : No data available
Viscosity, kinematic : No data available
Explosive properties : No data available
Oxidizing properties : No data available

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

Conditions to avoid : No data available
Incompatible materials : Strong acids, strong bases, strong oxidizers, metals and metallic compounds. “Refer to Section 2. Hazards”
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

Skin corrosion/irritation

Product

May cause skin irritation in susceptible persons.

Serious eye damage/eye irritation

Product

Remarks:

May irritate eyes.

Respiratory or skin sensitization

No data availability

Germ cell mutagenicity

No data availability

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
iRepertoire, Inc.
iR-Profile Reagent Kit: PCR 2 Reaction Mix

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

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods
Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.

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

Product Waste Disposal
Disclaimer: Dispose of waste product, unused product and contaminated packaging in compliance with federal, state and local regulations. If unsure of the applicable requirements, contact the authorities for information.

Sodium azide preservative may form explosive compounds in metal drain lines. See NIOSH Bulletin: Explosive Azide Hazard (8/16/76).
SECTION 15. REGULATORY INFORMATION

OSHA Hazards: No OSHA Hazards

EPCRA-Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS-No.</th>
<th>Component RQ (lbs.)</th>
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<tbody>
<tr>
<td>sodium azide</td>
<td>26628-22-8</td>
<td>1000</td>
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SARA 304 Extremely Hazardous Substance Reportable Quantity

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SARA 311/312 Hazards: Sodium Azide is subject to reporting requirements of Section 313, Title III of SARA. 1.0 % de minimis concentration

SARA 302: Sodium Azide is subject to reporting requirements of Section 313, Title III of SARA. 1.0 % de minimis concentration

SARA 313: Sodium Azide is subject to reporting requirements of Section 313, Title III of SARA. 1.0 % de minimis concentration

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). The following chemical(s) are listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F):

- hydrogen chloride: 7647-01-0

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489):

- glycerol: 56-81-5

Clean Water Act

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

This product does not contain any Hazardous Chemicals listed under the U.S. Clean Water 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

- sodium azide: 26628-22-8

Pennsylvania Right to Know

- water: 7732-18-5
- ammonium sulphate: 7783-20-2
- sodium azide: 26628-22-8
- Ficoll 400: 26873-85-8

New Jersey Right to Know

- water: 7732-18-5
- Ficoll 400: 26873-85-8
- Tris(hydroxymethyl)aminomethane: Tris
- 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.
SECTION 16. OTHER INFORMATION

Further Information

NFPA:

Flammability

Health

Special hazard.

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.