

# Material Safety Data Sheet

## ZiXpress® Viral DNA/RNA Extraction Kit

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### **Section 1. Identification of the substance and of the company**

**Product Name** ZiXpress® Viral DNA/RNA Extraction Kit

**Product Code** ZP02201

**Manufacturer** Zinexts Life Science Corp.

16F., No. 93, Sec. 1, Xintai 5th Rd., Xizhi Dist.,

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Tel: +886 2 2246 3579

Fax: +886 2 2243 8570

**Emergency Phone #** Contact your local hazardous material control center.

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### **Section 2. Hazards identification**

**Classification of the substance or mixture**

**Classification according to Regulation (EC) No 1272/2008 (CLP)**

Acute toxicity, Oral (Category 4), H302

Skin irritation (Category 2), H315

Eye irritation (Category 2A), H319

Resp. Sensitization (Category1), H334

**Label elements, including precautionary statements**

**Labelling according to Regulation (EC) No 1272/2008 (CLP)**

**Pictograms:**



**Signal Word:** Warning, Danger

**Hazard Statements :**

H302 Harmful if Swallowed.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

**Precautionary statements:**

P264 Wash hands thoroughly after handling.

P264+P265 Wash hands thoroughly after handling. Do not touch eyes.

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P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

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

P284 [In case of inadequate ventilation] Wear respiratory protection.

P302+P352 IF ON SKIN: wash with plenty of soap and water.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.

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### **Section 3. Composition and information on ingredients**

This product contains the following components and mixture of the following substances with non-hazardous additions.

#### ***Proteinase K:***

Contains < 5 % Proteinase K (CAS #: 39450-01-6), 40-50 % Glycerol (CAS#: 56-81-5)

#### ***Magnetic Beads B:***

The buffer contains no substances which at their given concentration, are considered to be hazardous.

#### ***Lysis Buffer B:***

Contains 20-50% Guanidine Thiocyanate (CAS #: 593-84-0)

#### ***Binding Buffer 5:***

The buffer contains no substances which at their given concentration, are considered to be hazardous.

#### ***Wash Buffer Z2:***

Contains 20-50% Guanidine Thiocyanate (CAS #: 593-84-0)

#### ***Wash Buffer A:***

The buffer contains no substances which at their given concentration, are considered to be hazardous.

#### ***Wash Buffer B:***

The buffer contains no substances which at their given concentration, are considered to be hazardous.

#### ***RNase-Free Water:***

The buffer contains no substances which at their given concentration, are considered to be hazardous.

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### **Section 4. First aid measures**

***Skin irritation:*** Itching or burning of the skin. Immediately flush the skin with plenty of water while removing contaminated clothing and shoes. Get immediate medical attention. Wash contaminated clothing before reuse.

***Eye irritation:*** Flush immediately with large amounts of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Get immediate medical attention.

***Inhalation:*** Remove exposed person from source of exposure to fresh air. If not breathing, clear airway and start cardiopulmonary resuscitation (CPR). Avoid mouth-to-mouth resuscitation.

***Ingestion:*** Get immediate medical attention. Do not induce vomiting unless directed by medical personnel. Call a poison center or doctor/physician if you feel unwell.

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### **Section 5. Fire Fighting measures**

Extinguishing media: carbon dioxide (CO<sub>2</sub>), extinguishing powder or water spray or alcohol-resistant foam.

Protective equipment and precautions for firefighters: Standard procedure for chemical fires.

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### **Section 6. Accidental release measures**

#### ***Actions to be taken on spillage:***

Wash off small quantities with plenty of water. Small spills: Take up with sand or other noncombustible absorbent material and place into containers for later disposal. Large spills: Dike far ahead of liquid spill for later disposal.

#### ***Absorbent material:***

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

#### ***Actions to be taken to limit damage:***

Prevent release to the environment if possible. Prevent discharge of the product into the sewage system, cesspits and cellars. Vapors produce potentially explosive atmosphere If substance has entered a water course or sewer or contaminated soil, advise police or fire brigade.

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### **Section 7. Handling and storage**

***Advice on protection against fire and explosion:*** Normal measures for preventive fire protection.

***Advice on safe handling:*** For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area

***Materials to avoid:*** Do not store near magnetic field.

***Further information on storage stability:*** Keep receptacles tightly sealed and store according to the instructions in the assay protocol. Storage: at 15~ 25°C | 59~ 77°F.

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### **Section 8. Exposure controls/personal protection**

Follow standard laboratory safety procedures, including:

***Respiratory protection:*** Filter A only in the case of a given exposure.

***Eye protection:*** Wear safety glasses

***Hand protection:*** Protective gloves. Glove material: Compatible chemical-resistant gloves.

***Skin and body protection:*** Protective clothing. Choose body protection according to the amount and concentration of the dangerous substance at the work place.

***Hygiene measures:*** Keep away from food and drink. When using do not eat, drink or smoke. Wash and dry hands before break and at the end of workday.

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### **Section 9. Physical and chemical properties**

***Appearance:*** liquid

***Refer to 3. Composition/Information on Ingredients.***

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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 thermal conditions.

**Conditions to avoid:** No data available

**Incompatible materials:** No data available

**Hazardous decomposition products:** Nitrogen oxides (NO<sub>x</sub>), Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>), Hydrogen chloride gas.

**Dangerous Reactions:** none.

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### **Section 11. Toxicological information**

The toxicological effects of this product have not been thoroughly studied. We recommend handling all chemicals with caution.

**Product:**

Acute oral toxicity: No data available

Acute inhalation toxicity: No data available

Acute dermal toxicity: No data available

**Components:**

Glycerol-Oral LD50 Rat: 12600 mg/kg; Dermal LD50 Rabbit: 10,000 mg/kg. Corrosion/irritation rabbit: mild skin irritation- 24 h; mild eye irritation Rabbit-24 h.

Other information on acute toxicity: no data available.

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### **Section 12. Ecological information**

Avoid release into the environment. Runoff from fire control or dilution water may cause pollution.

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### **Section 13. Disposal considerations**

**Waste disposal route:** Dispose in accordance with local, state or national regulations.

**Disposal of empty packaging:** Empty containers should be washed and taken to an approved waste handling site for recycling or disposal.

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### **Section 14. Transport information**

International Regulations

**UN Number:** Not relevant

**UN proper shipping name:** Not relevant

**Transport hazard class(es):** Not Applicable

**Packing group:** Not Applicable

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**Environmental hazards:** Not relevant

**Special precautions for user:** Not special precautions

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

Not Applicable

**This product is safe under IATA DGR 62th Edition 2021.**

**ADR-RID:** Not classified

**DOT (US):** Not classified

**IATA-DGR:** Not classified

**IMDG-Code:** Not classified

**Additional Transport Information:** transport in accordance with local, state and national regulations

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### **Section 15. Regulatory information**

The material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006 (REACH)

REACH – Annex XIV	Not applicable
REACH-Candidate list of Substances of very high concern for authorization to Regulation (EC) No. 1907/2006	Not applicable
REACH-Annex XVII	Not applicable

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### **Section 16. Other information**

The information contained in this SDS was obtained from sources we believe are reliable. However, the above information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release, and is provided without warranty, expressed or implied, regarding its correctness. The recipient of our product is responsible for ensuring that, where applicable, existing laws and guidelines are observed.