

**Product Name:** TritEx® Viral RNA Extraction Kit**SECTION 1: Identification of the Substance/Mixture and of the Company/Undertaking****1.1 Product identifier:**

Substance name: Binding/Lysis Buffer (TBL)

**1.2 Relevant identified uses of the substance or mixture and uses advised against**

Recommended restrictions on use: For professional users only.

**1.2 Details of the supplier of the safety data sheet**

Manufacturer / Supplier: TritaGene Biotech Co.  
Street address / P.O. Box: Pajooresh Blvd., Hakim (Hamedani) Hwy.  
Country ID / Postcode / Place: Iran  
Telephone number: +98 (21) 44 18 01 81-2  
Telefax: +98 (21) 44 18 57 14  
E-Mail: tritagene@gmail.com  
National contact: TritaGene Biotech Co.

**1.3 Emergency Telephone Number**Opening Hours: +98 (21) 44 18 01 82  
08-17 Sat. to Wed., Only available during work hours.**SECTION 2: Hazards Identification****2.1 Classification of the substance or mixture**

Skin irritation: Category 2

**2.1.1 classification according to regulation (EC) No 1272/2008 (CLP)**

Eye irritation: Category 2A

Skin sensitization: Category 1

**2.2 Label elements**Labelling according to Regulation (EC) No 1272/2008  
[CLP/GHS]**Hazard pictograms:****Signal word:**

Warning

**Hazard statements:**

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

**Precautionary statements:**

P280

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

**2.3 Other hazards**

Risk of blindness after swallowing the product


**SECTION 3: Composition/Information on Ingredients**

**3.1 Substances**

Substances name: No data available  
 INDEX No.: No data available  
 EC NO.: No data available  
 REACH No.: No data available  
 CAS No.: No data available  
 Purity: No data available  
 Synonyms: No data available  
 Stabilizers: No data available  
 Hazard impurities: No data available

**3.2 Mixtures**

Description of the mixture: Mixture Buffer solution containing aqueous solution of guanidium thiocyanate, Tris salt, X substance and distilled water  
 Hazardous ingredients guanidine thiocyanate (CAS-No. 593-84-0)

Name of substance	Identifier	Pictograms
Guanidinium salt	CAS No.: 593-84-0	
Tris	CAS No.: 77-86-1	Not classified

**SECTION 4: First Aid Measures**

**4.1 Description of first aid measures**

**General advice:** Move out of dangerous area. Show this material safety data sheet to the doctor in attendance.

**If inhaled:** If unconscious place in recovery position and seek medical advice. 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 skin irritation persists, call a physician.

**In case of eye contact:** Immediately flush eye(s) with plenty of water. 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.



**4.2 Most important symptoms and effects, both acute and delayed**

Symptoms:

Causes skin irritation.

Effects:

May cause an allergic skin reaction.

Causes serious eye irritation.

**4.3 Indication of any immediate medical attention and special treatment needed**

Notes for doctor:

No information available.

Special treatment:

No information available.

**SECTION 5: Fire-Fighting Measures**

**5.1 Extinguishing media**

Suitable extinguishing media:

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

Unsuitable extinguishing :

High volume water jet

**5.2 Special hazards arising from the substance or mixture**

Specific hazards during firefighting:

Exposure to decomposition products may be a hazard to health.

Hazardous combustion products:

Carbon oxides, Nitrogen oxides (NOx)

**5.3 Advice for fire-fighters**

Special protective equipment for firefighters:

Wear self-contained breathing apparatus for firefighting if necessary.

Further information:

Prevent fire extinguishing water from contaminating surface water or the ground water system.

**SECTION 6: Accidental Release Measures**

**6.1 Personal precautions, protective equipment and emergency procedures**

6.1.1 For non-emergency personnel:

Use personal protective equipment.

Ensure adequate ventilation.

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

6.1.2 For emergency responders

See section 8

**6.2 Environmental precautions**

Prevent product from entering drains.

Prevent further leakage or spillage if safe to do so.

**6.3 Methods and materials for containment and cleaning up**

6.3.1 For containment:

Keep in suitable, closed containers for disposal.

6.3.2 For cleaning up:

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

6.3.3 Other information:

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**SECTION 7: Handling and Storage**



**7.1 Precautions for safe handling**

Advice on safe handling:

Do not breathe vapors/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Dispose of rinse water in accordance with local and national regulations. Persons susceptible to skin sensitization problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.

**7.2 Conditions for safe storage, including any incompatibilities**

Technical measures and storage conditions:

Keep container tightly closed in a dry and well-ventilated place.

**SECTION 8: Exposure controls/personal protection**

**8.1 Control parameters**

Ingredients with workplace control parameters

**8.2 Personal protection equipment:**

Eye and face protection:

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses. Ensure that eyewash stations and safety showers are close to the workstation location.

Hand and Skin protection:

Protective gloves complying with EN 374 and Footwear protecting against chemicals

Respiratory protection:

In the case of vapor formation use a respirator with an approved filter.

**SECTION 9: Physical and Chemical Properties**

**9.1 Information on basic physical and chemical properties:**

a) Appearance:	Liquid
b) Odor:	Odorless
c) Odor threshold:	No data available
d) pH:	6.5-7.5
e) Melting point / freezing point:	No data available
f) Initial boiling point and boiling range:	No data available
g) Flash point:	No data available
h) Evaporation rate:	No data available
j) Upper / lower flammability or explosive limits	No data available
k) Vapor pressure	No data available
l) Vapor density	No data available
m) Relative density	No data available



n) Solubility(ies)	No data available
o) Partition coefficient: n-octane/water	No data available
p) Auto-ignition temperature	No data available
q) Decomposition temperature	No data available
r) Viscosity	No data available
s) Explosive properties	No data available
t) oxidizing properties	No data available

## 9.2 Other information

### SECTION 10: Stability and Reactivity

<b>10.1 Reactivity:</b>	No decomposition if stored and applied as advised.
<b>10.2 Chemical stability:</b>	The product is chemically stable under standard ambient conditions (room temperature).
<b>10.3 Possibility of hazardous reactions:</b>	Violent reactions possible with: Strong oxidizing agents Hazardous decomposition products formed under fire conditions. Keep away from oxidizing agents, and acidic or alkaline products.
<b>10.4 Conditions to avoid:</b>	No data available
<b>10.5 Incompatible materials:</b>	No data available
<b>10.6 Hazardous decomposition products:</b>	No data available

### SECTION 11: Toxicological Information

#### 11.1 Information on toxicological effects

<b>Acute toxicity</b>	No data available
<b>Skin corrosion/irritation</b>	No data available
<b>Serious eye damage/eye irritation</b>	No data available
<b>Respiratory or skin sensitization</b>	No data available
<b>Germ cell mutagenicity</b>	No data available



<b>Carcinogenicity</b>	No data available
<b>Specific target organ toxicity - single exposure</b>	No data available
<b>Specific target organ toxicity - repeated exposure</b>	No data available
<b>Aspiration hazard</b>	No data available

**SECTION 12: Ecological Information**

<b>12.1 Toxicity</b>	No data available
<b>12.2 Persistence and degradability</b>	No data available
<b>12.3 Bio accumulative potential</b>	No data available
<b>12.4 Mobility in soil</b>	No data available
<b>12.5 Results of PBT and vPvB assessment</b>	No data available
<b>12.6 Other adverse effects</b>	No data available

**SECTION 13: Disposal Considerations**

<b>13.1 Waste treatment methods</b>	Send to a licensed waste management company. Dispose of as hazardous waste in compliance with local and national regulations.
<b>Disposal methods Waste from residues:</b>	
<b>Contaminated packaging:</b>	Dispose of as unused product. Do not re-use empty containers.

**SECTION 14: Transport Information**

<b>14.1. UNRTDG</b>	Not regulated as a dangerous good
<b>14.2. IATA-DGR</b>	Not regulated as a dangerous good
<b>14.3. IMDG-Code</b>	Not regulated as a dangerous good
<b>14.4. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	No data available
<b>14.5. Domestic regulation</b>	Not regulated as a dangerous good



**14.6. Special precautions for user:**

No data available

**Remarks :**

Not classified as dangerous in the meaning of transport regulations.

**SECTION 15: Regulatory Information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

- COUNCIL DIRECTIVE on the approximation of laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances (67/548/EEC)
- DIRECTIVE 1999/45/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL
- German order governing protection from hazardous substances (Ordinance on Hazardous Substances / Gefahrstoffverordnung -GefStoffV)
- TRGS 200, German engineering rules governing the classification and labelling of hazardous substances, preparations and products

**15.2 Chemical safety Assessment**

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

**SECTION 16: Other Information**

The information provided in this 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.

