

## 1. Identification of the substance/preparation and of the company

- Identification of the substance or preparation:

### Binding Solution (H1)

SKU: NP100015, NP100016

Order Numbers: 11458-015, 11458-023

- Company Identification:

OriGene Technologies, Inc  
9620 Medical Center Drive, Suite 200 Rockville, MD 20850  
Tel: (301)-340-3188, Fax: (301)-340-9254

- Emergency Address:

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## 2. Composition/information on ingredients

1.0 - 8.0 M guanidine hydrochloride, 1 - 900 mM Tris-HCl, pH 7.0 in water. Contains 5 - 50% isopropanol.

## 3. Hazards identification

Toxic.

Harmful if swallowed, if breathed and on contact with the skin.

Causes severe irritations (bone marrow, nerves).

In case of contact with eyes, rinse immediately with plenty of water and seek medical advise. Wear appropriate protection clothing.

## 4. First aid measures

In case of contact with eyes and skin, rinse immediately with plenty of water and seek medical advise. in between, change the contaminated clothing.

Draw asunder the eyelids, so that the eyes can be rinsed thoroughly.

If breathed, bring person immediately to fresh air. In case of a standstill of the breathing carry out artificial respiration. If breathing is difficulty give oxygen.

If swallowed rinse mouth with plenty of water and seek medical advise.

Wash contaminated clothing before next use.

## 5. Fire-fighting measures

Not inflammable. Choose suitable extinguishing media according to environmental conditions.

Waterjet, dry extinguishing media or suitable foam.

Special protective equipment for firefighters:

Wear self contained breathing apparatus, approved gas mask and protective clothing to avoid contact with eyes and skin.

On fire toxic fumes are set free.

## 6. Accidental release measures

- personal precautions such as: Wear self contained breathing apparatus, heavy gloves and suitable protective clothing.

- methods for cleaning up such as: Wipe up liquid and dispose in accordance with state or local laws. Avoid aerosols. Clean and ventilate the concerning area after complete removal of the liquid.

## 7. Handling and storage

see section 8 below

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

- respiratory protection: Use NIOSH/MSHA approved respirator if generating aerosols.
- hand protection: Rubber or latex gloves.
- eye protection: Safety goggles.
- skin protection: Suitable protective clothing.

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

- appearance: clear liquid
- pH: 7.0
- boiling point: N. I.
- melting point: N. I.
- specific gravity: N. I.
- vapor pressure: N. I.

### **10. Stability and reactivity**

- conditions to avoid: strong oxidizers
- hazardous decomposition products: toxic fumes of carbon monoxide, carbon dioxide, nitrogen oxides and hydrogen chloride.

### **11. Toxicological information**

Acute effects (guanidine hydrochloride):

Harmful if swallowed, breathed or on contact with the skin.

Leads to severe irritations.

High concentrations of guanidine hydrochloride are extremely harmful for the tissues of the mucous membranes and the upper respiratory tract, eyes and skin.

After contact the following symptoms can occur: feeling of heat, cough, difficulty of breathing, laryngitis, shortness of breath, headache, nausea and vomiting.

May cause disturbance of the nerve system.

Affected organs: bone marrow, nerves

Information about affected organs:

Behavioral (altered sleep time),

Behavioral (convulsions or effect on seizure threshold),

Behavioral (excitement),

Behavioral (muscle contraction or spasticity),

Behavioral (irritability).

Lungs, thorax or respiration (dyspnea); gastrointestinal (hypermotility, diarrhea).

These are only selected data of the "Registry of toxic effects of chemical substances " (RTECS). For further informations see RTECS.

### **12. Ecological information**

On regular use no prejudice is to be expected.

### **13. Disposal considerations**

The component should be disposed in accordance with state or local laws.

#### 14. Transport information

**IATA:** Proper Shipping Name: Flammable Liquid, N.O.S.

Hazard Class: 3                      Subsidiary Class: None

Packing Group : III                      UN: 1993

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**15. Regulatory information**

The product has been classified and marked in accordance with EU Directives/Ordinance on Hazardous Materials.

Attention: This preparation has not yet been thoroughly tested.

R: 22

Harmful if swallowed.

R: 36/38

Irritating to eyes and skin.

S: 36

Wear suitable protective clothing.

**16. Other information**

The above-mentioned data correspond to our present state of knowledge and experience. Although utmost care has been taken in the composition of this text, the publisher cannot be hold responsible for any damage resulting from any eventual error in this publication.