

# Material Safety Data Sheet

## 1 Identification of the substance/mixture and of the company/undertaking

**Product Name** : TotalRNAExtractor (Trizol)  
**Product No.** : F201801  
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## 2 Hazards identification

### 2.1 Emergency Overview

#### WHMIS Classification

|     |  |                       |
|-----|--|-----------------------|
| D1B | Toxic Material Causing Immediate and Serious Toxic Effects | Toxic by ingestion    |
| D2B | Toxic Material Causing Other Toxic Effects                 | Moderate eye irritant |
| E   | Corrosive Material   | Corrosive             |

#### GHS Classification

Acute toxicity, Oral (Category 4)  
 Skin irritation (Category 2)  
 Serious eye damage (Category 1)  
 Specific target organ toxicity - single exposure (Category 3), Respiratory system  
 Acute aquatic toxicity (Category 3)

#### GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)

- H302 Harmful if swallowed.  
 H315 Causes skin irritation.  
 H318 Causes serious eye damage.  
 H335 May cause respiratory irritation.  
 H402 Harmful to aquatic life.

Precautionary statement(s)

- P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.  
 P280 Wear protective gloves/ eye protection/ face protection.  
 P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes.  
 Remove contact lenses, if present and easy to do. Continue rinsing.

## 2.2 HMIS Classification

- Health hazard: 3  
 Chronic Health Hazard: \*  
 Flammability: 0  
 Physical hazards: 0

## 3 Composition/information on ingredients

### 3.1 Mixtures

DANGEROUS COMPONENTS: PHENOL SATURATED SOLUTION.

| SUBSTANCE NAME        | CAS #    | PERCENT | SARA 313 |
|-----------------------|----------|---------|----------|
| PHENOL                | 108-95-2 | 40-50%  | YES      |
| GUANIDINE THIOCYANATE | 593-84-0 | 20-35   | NO       |
| 2-MERCAPTOETHANOL     | 60-24-2  | 0.5-2%  | NO       |

## 4 First aid measures

### 4.1 Description of first aid measures

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

#### In case of eye contact

Flush eyes with water as a precaution.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.

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

No data available

**5 Firefighting measures**

**5.1 Extinguishing media**

**Suitable extinguishing media**

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

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

Oxides of phosphorus, Hydrogen chloride gas, Sodium oxides

**5.3 Advice for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

**5.4 Further information**

No data available

**6 Accidental release measures**

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

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure

adequate ventilation. Avoid breathing dust.

For personal protection see section 8.

**6.2 Environmental precautions**

Do not let product enter drains.

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

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed

containers for disposal.

**6.4 Reference to other sections**

For disposal see section 13.

**7 Handling and storage**

### **7.1 Precautions for safe handling**

Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.2.

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

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

Storage class (TRGS 510): Combustible Solids

### **7.3 Specific end use(s)**

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

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

### **8.1 Control parameters**

### **8.2 Exposure controls**

#### **Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and

at the end of workday.

#### **Personal protective equipment**

##### **Eye/face protection**

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and

approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

##### **Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique

(without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.

Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and

the standard EN 374 derived from it.

##### **Body Protection**

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected

according to the concentration and amount of the dangerous substance at the specific

workplace.

### **Respiratory protection**

Respiratory protection is not required. Where protection from nuisance le (EN 143) dust masks.

Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

### **Control of environmental exposure**

Do not let product enter drains.

## **9 Physical and chemical properties**

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

|   |                   |
|---|-------------------|
| a) Appearance                                   | Form: liquid      |
| b) Odour  | No data available |
| c) Odour Threshold                              | No data available |
| d) pH   | 4.6               |
| 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 |
| i) Flammability (solid, gas)                    | No data available |
| j) Upper/lower flammability or explosive limits | No data available |
| k) Vapour pressure                              | No data available |
| l) Vapour density                               | No data available |
| m) Relative density                             | No data available |
| n) Water solubility                             | No data available |
| o) Partition coefficient: noctanol/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 safety information**

No data available

## **10 Stability and reactivity**

### **10.1 Reactivity**

No data available

**10.2 Chemical stability**

Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**

No data available

**10.4 Conditions to avoid**

No data available

**10.5 Incompatible materials**

No data available

**10.6 Hazardous decomposition products**

Hazardous decomposition products formed under fire conditions. - Oxides of phosphorus,

Hydrogen

chloride gas, Sodium oxides

Other decomposition products - No data available

In the event of fire: see section 5

**11 Toxicological information**

**11.1 Information on toxicological effects**

**Acute toxicity**

No data available

**Skin corrosion/irritation**

No data available

**Serious eye damage/eye irritation**

No data available

**Respiratory or skin sensitisation**

No data available

**Germ cell mutagenicity**

No data available

**Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**Reproductive toxicity**

No data available

**Specific target organ toxicity - single exposure**

No data available

**Specific target organ toxicity - repeated exposure**



|                                    |                                 |                                 |
|------------------------------------|---------------------------------|---------------------------------|
| ADR/RID: Not<br>dangerous<br>goods | IMDG: Not<br>dangerous<br>goods | IATA: Not<br>dangerous<br>goods |
|------------------------------------|---------------------------------|---------------------------------|

**14.3 Transport hazard class(es)**

|            |         |         |
|------------|---------|---------|
| ADR/RID: - | IMDG: - | IATA: - |
|------------|---------|---------|

**14.4 Packaging group**

|            |         |         |
|------------|---------|---------|
| ADR/RID: - | IMDG: - | IATA: - |
|------------|---------|---------|

**14.5 Environmental hazards**

|            |         |         |
|------------|---------|---------|
| ADR/RID: - | IMDG: - | IATA: - |
|------------|---------|---------|

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

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

**15.2 Chemical safety assessment**

For this product a chemical safety assessment was not carried out

**16 Other information**

Further information: no limited for paper copy, just for internal uses.

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sangon Biotech shall not be held liable for any damage resulting from handling or from contact with the above products.