

**Safety Data Sheet**

Revision Date: 2-July-2015

24 Hour Emergency #: 1-800-255-3924

**1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

PRODUCT NAME: Tris-HCl 1M pH 8.0  
CATALOG NUMBER: 351-007-101  
CHEMICAL NAME: An aqueous solution of Tris (hydroxymethyl) aminomethane (Tris base) and Hydrochloric acid.

**Company/Undertaking Identification**

Quality Biological Inc.  
7581 Lindbergh Drive  
Gaithersburg, MD 20879  
301-840-9331

**2. HAZARDS IDENTIFICATION****GHS – Classification**

Classification  
Signal Word

Skin Irritant 2 Eye Irritant 2  
Warning

**Hazard Statements**

H315 - Causes skin irritation H319 - Causes serious eye irritation H335 – May cause respiratory irritation

**Precautionary Statements**

P280 - Wear protective gloves/protective clothing/eye protection/face protection  
P302+ P352 - IF ON SKIN: Wash with plenty of soap and water P304 + P340 – IF INHALED: Remove victim to fresh air and keep at rest in a position 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

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	EC No.	REACH Reg. No.	CAS-No	Weight %	Classification
Tris hydroxymethyl aminomethane	EEC No. 201-064-4	Not available	77-86-1	12.1	-
Hydrogen chloride	EEC No. 231-595-7	Not available	7647-01-0	4.6	Xi;R37 C;R34

## 4. FIRST AID MEASURES

<b>Skin contact</b>	Immediately wash skin with copious amounts of water followed by washing with soap and copious amounts of water. Remove all contaminated clothing.
<b>Eye contact</b>	Flush eyes with copious amounts of water for at least 15 minutes with eyelids separated and call a physician.
<b>Ingestion</b>	Never give anything by mouth to an unconscious person
<b>Inhalation</b>	If person is unconscious seek emergency medical attention, if person is conscious remove to fresh air and call a physician
<b>Notes to physician</b>	Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

**General:** Wear Self-Contained breathing apparatus in pressure demand, MSHA/NIOSH approved. During a fire, irritating and toxic gases may be generated by thermal decomposition.

**Extinguishing Media:** Use extinguishing media appropriate to surrounding fire conditions..

**Autoignition Temperature:** N/A

**Explosion limits:** Not sensitive.

**Flash Point:** Not flammable.

## 6. ACCIDENTAL RELEASE MEASURES

**Use Personal Protective Equipment:** Including Chemical Splash Goggles, Chemical Resistant Gloves, and appropriate clothing to prevent skin exposure. In addition, a Respiratory protection program that complies with OSHA 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

**Spills and Leaks:** Absorb spill with inert material (e.g. Vermiculite, sand, earth) then place in a suitable container. Clean up spills immediately, observing precautions in the Sections 6 and 8. Provide ventilation.

## 7. HANDLING AND STORAGE

<b>Handling</b>	Handle in accordance with good industrial hygiene and safety practice.
<b>Storage</b>	Keep containers tightly closed in a dry, cool and well-ventilated place.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Occupational exposure controls

### Exposure limits

**Engineering measures** Ensure adequate ventilation, especially in confined areas

## **Personal protective equipment**

<b>Respiratory protection</b>	In case of insufficient ventilation wear suitable respiratory equipment
<b>Hand protection</b>	Protective gloves
<b>Eye protection</b>	Safety glasses with side-shields
<b>Skin and body protection</b>	Lightweight protective clothing.
<b>Hygiene measures</b>	Handle in accordance with good industrial hygiene and safety practice
<b>Environmental exposure</b>	
<b>Controls</b>	Prevent product from entering drains.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### **General Information**

**Form** Liquid

### **Important Health Safety and Environmental Information**

<b>Boiling point/range</b>	°C No data available	°F No data available
<b>Melting point/range</b>	°C No data available	°F No data available
<b>Flash point</b>	°C No data available	°F No data available
<b>Autoignition temperature</b>	°C No data available	°F No data available
<b>Oxidizing properties</b>	No information available	
<b>Water solubility</b>	No data available	

## 10. STABILITY AND REACTIVITY

<b>Stability</b>	Stable under recommended storage conditions.
<b>Materials to avoid</b>	No information available
<b>Hazardous decomposition products</b>	Carbon oxides, Nitrogen oxides (NOx).
<b>Polymerization</b>	Hazardous polymerisation does not occur.
<b>Incompatible Products</b>	Strong oxidizing agents.

## 11. TOXICOLOGICAL INFORMATION

### **Acute toxicity**

Irritating to eye, skin and respiratory system. May be harmful if swallowed.

### **Principle Routes of Exposure/ Potential Health effects**

<b>Eyes</b>	No information available
<b>Skin</b>	No information available
<b>Inhalation</b>	No information available
<b>Ingestion</b>	No information available



## Specific effects

<b>Carcinogenic effects</b>	No information available
<b>Mutagenic effects</b>	No information available
<b>Reproductive toxicity</b>	No information available
<b>Sensitization</b>	No information available

## Target Organ Effects

None known.

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Harmful to aquatic organisms.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Microtox	Daphnia Magna (Water Flea)
Hydrogen chloride		LC50= 282 mg/L Gambusia affinis 96 h		

## 13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with local regulations

## 14. TRANSPORT INFORMATION

### IATA

<b>Proper shipping name</b>	Not classified as dangerous in the meaning of transport regulations
<b>Hazard Class</b>	No information available
<b>Subsidiary Class</b>	No information available
<b>Packing group</b>	No information available
<b>UN-No</b>	No information available

## 15. REGULATORY INFORMATION

### International Inventories

#### U.S. Federal Regulations

##### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values %
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Hydrogen chloride	7647-01-0	6.4	1.0
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## Clean Air Act, Section 112 Hazardous Air Pollutants (HAPS) (see 40 CFR 61)

This product contains the following substances which are listed hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act:

Chemical Name	CAS-No	Weight %	HAPS data	VOC Chemicals	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Hydrogen chloride	7647-01-0	6.4	Present			

## U.S. State Regulations

### California Proposition 65

This product does not contain chemicals listed under Proposition 65

### WHMIS hazard class:

D2B Toxic materials



Chemical Name	NPRI
Hydrogen chloride	X

## 16. OTHER INFORMATION

This material is sold for research and development purposes only. It is not for any human or animal therapeutic or clinical diagnostic use. It is not intended for food, drug, household, agricultural, or cosmetic use. An individual technically qualified to handle potentially hazardous chemicals must supervise the use of this material.

**THE ABOVE INFORMATION IS BELIEVED TO BE CORRECT; HOWEVER, IT MAY NOT BE ALL INCLUSIVE. THIS INFORMATION SHOULD BE USED ONLY AS A GUIDE. QUALITY BIOLOGICAL, INC. SHALL NOT BE HELD LIABLE FOR ANY DAMAGE RESULTING FROM THE HANDLING OR CONTACT WITH THE ABOVE PRODUCT.**

**End of Safety Data Sheet**