

## MATERIAL SAFETY DATA SHEET

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### SECTION 1: CHEMICAL IDENTIFICATION

Code: PR0614-500G ; PR0614-1kG

Name: Tris-HCl

### SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name:

1,3-Propanediol,2-amino-2-(hydroxymethyl)-,hydrochloride

CAS No.:

1185-53-1

EC No.:

214-684-5

### SECTION 3: HAZARDS IDENTIFICATION

#### GHS Classification

**GHS labels elements, including precautionary statements**



Signal word: Warning

#### **Hazard statements**

H315

Causes skin irritation

H319

Causes serious eye irritation

H335

May cause respiratory irritation

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## Precautionary statements

P261	Avoid breathing dust, fume, gas, mist, vapors, spray.
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
P305+P351+P338	If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

## OSHA Hazards

Skin corrosion/irritation-	Category 2
Serious eye damage/eye irritation-	Category 2
Specific target organ toxicity (single exposure)-	Category 3

## SECTION 4: FIRST-AID MEASURES

In case of eye contact, wash copiously with water for up to 15 minutes. Consult a physician.

In case of skin contact, wash with soap and excess water. Remove all contaminated clothes and shoes. Seek medical assistance if irritation is persistent.

In case of inhalation, remove victim to fresh air. If not breathing give artificial respiration. Seek medical assistance if there are problems.

In case of ingestion, wash out mouth with water provided the person is conscious. Never give anything by mouth to an unconscious person. Seek medical assistance if there is abdominal discomfort.

## SECTION 5: FIRE FIGHTING MEASURES

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Use water spray, dry chemical, earth, sand, regular foam or carbon dioxide.

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH and full protective gear.

Hazardous decomposition products formed under fire conditions:	Carbon oxides, nitrogen oxides
Explosion data – sensitivity to mechanical impact:	None.
Explosion data – sensitivity to static discharge:	None.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

For personal protection, use personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid dust formation. Ensure adequate ventilation.

For environmental precautions, prevent further spillage if safe to do so.

For cleaning up, sweep up and shovel. Avoid dust formation. Pick up and transfer to suitable, closed containers for disposal. Ventilate area and wash spill site after material pickup is done.

## SECTION 7: HANDLING AND STORAGE

Handle in accordance with good industrial hygiene and safety practice.  
Keep containers tightly closed in a dry, cool and well-ventilated place.  
Hygroscopic.  
Incompatible with strong oxidizing agents and bases.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory protection	Where exposure limits are exceeded, wear respiratory protection. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Positive-pressure supplied air respirators may be required for high airborne contamination concentrations.
Eye/face protection	Use safety glasses with side-shields.
Skin and body protection	Impervious clothing. Wear protection gloves/clothing.

Use engineering measures such as showers, eyewash stations and ventilation systems.  
Handle in accordance with good industrial hygiene and safety practice.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	White
Physical state:	Crystalline powder to needle-like crystals
Odor:	No information available
Odor threshold:	No information available
pH:	No information available
Melting Point:	No information available
Boiling Point:	No information available
Flash Point:	No information available
Auto-ignition temperature:	No information available
Ignition Temperature:	No data available
Explosive Properties:	No data available
Water Solubility:	No information available
Partition coefficient (n-octanol/water):	No information available
Bulk density:	No information available

## SECTION 10: STABILITY AND REACTIVITY

Stable under recommended storage conditions.  
Materials to avoid: Strong oxidizing agents, bases  
Hazardous decomposition products: Carbon oxides, nitrogen oxides  
Condition to avoid: Hygroscopic

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## **SECTION 11: TOXICOLOGICAL INFORMATION**

### **Acute toxicity**

No information available.

### **Chronic toxicity**

No information available.

100% of the mixture consists of ingredient(s) of unknown toxicity.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## **SECTION 12: ECOLOGICAL INFORMATION**

### **Ecotoxicity**

No information available.

## **SECTION 13: DISPOSAL CONSIDERATIONS**

Dispose waste material in accordance with all federal, state and local environmental regulation.

For contaminated packing too dispose of as unused product in accordance with all federal, state and local environmental regulation. Do not reuse empty container.

For surplus and non-recyclable solution, offer to a licensed disposal company.

Observe all federal, state and local environmental regulations.

## **SECTION 14: TRANSPORT INFORMATION**

### **DOT (US)**

Not dangerous products.

### **IATA**

Not dangerous products.

## **SECTION 15: REGULATORY INFORMATION**

### **International inventories**

<b>TSCA</b>	Complies
<b>DSL/NDSL</b>	Complies
<b>EINECS/ELINCS</b>	Complies
<b>ENCS</b>	Do not comply
<b>IECSC</b>	Complies
<b>KECL</b>	Complies
<b>PICCS</b>	Complies
<b>AICS</b>	Complies

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## **U.S. Federal Regulations**

### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulation, Part 372.

### **SARA 311/312 Hazards Categories**

Acute Health Hazard	No
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

### **Clean Water Act**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

### **CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

## **U.S. State Regulations**

### **California Prop. 65 Components**

This product does not contain any Proposition 65 chemicals.

### **U.S. EPA Label Information**

#### **EPA Pesticide Registration Number**

Not regulated.

## **SECTION 16: OTHER INFORMATION**

The information contained in this MSDS relates only to the material(s) designed and does not relate to use(s) in combination with any other material, process(es) and /or chemical reaction(s). Vivantis Technologies Sdn. Bhd. provides this information in good faith, from sources believed to be accurate; however, Vivantis assumes no liability for its accuracy or completeness, and thus shall not be held liable for any damage resulting from handling or from contact with the above product.

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