

# Safety Data Sheet

## Buffer Solution

### Section 1 - Chemical Product and Company Identification

**MSDS Name:** Tris Base, 20 mM

**Catalog Numbers:** RS-1, RS-3, RS-4

**Synonyms:** Tris base solution

**Company Identification:**

Sportsman Consulting DBA Vinmetrica 1945 Camino Vida Roble, Ste I, Carlsbad CA

**For information, call:** 760-494-0597

### Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent
7732-18-5	Water	99.76%
77-86-1	Tris Base	0.24%

### Section 3 - Hazards Identification

**Appearance:** clear, colorless liquid.

#### 3.1 Classification of the substance

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Skin irritation (Category 2), H315

Eye irritation (Category 2A), H319

#### 3.2 GHS Label elements, including precautionary statements

Signal word: Warning

Hazard statement(s)

H315 Causes skin irritation.

H319 Causes serious eye irritation.

Precautionary statement(s)

P264 Wash skin thoroughly after handling.

P280 Wear protective gloves/ eye protection/ face protection.

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P321 Specific treatment (see supplemental first aid instructions on this label).

P332 + P313 If skin irritation occurs: Get medical advice/ attention.

P337 + P313 If eye irritation persists: Get medical advice/ attention.

P362 Take off contaminated clothing and wash before reuse.

#### 3.3 Adverse Human Health effects and Symptoms:

May cause skin and eye irritation.

### Section 4 - First Aid Measures

**Eyes:** Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

**Skin:** Flush skin with plenty of water. Get medical aid if irritation develops or persists.

**Ingestion:** Never give anything by mouth to an unconscious person. Get medical aid. Do not induce vomiting without medical advice.

**Inhalation:** Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.

**Notes to Physician:** Treat symptomatically and supportively.

**Antidote:** None reported.

## Section 5 - Fire Fighting Measures

**Extinguishing Media:** Use water spray, alcohol resistant foam, dry chemical or carbon dioxide.

**Flash Point:** No data available

**Autoignition Temperature:** No data available.

**Explosion Limits, Lower:** No data available

**Upper:** No data available.

**Fire Fighting Media and Instructions:** Wear self contained breathing apparatus for fire fighting if necessary.

## Section 6 - Accidental Release Measures

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container.

## Section 7 - Handling and Storage

**Handling:** Wash hands before eating. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing.

**Avoid inhalation of vapor or mist.**

Avoid ingestion and inhalation.

**Storage** Store in a freezer at 2-8° C.

## Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Handle in accordance with good industrial hygiene and safety practice. Wash hands thoroughly after use.

**Personal Protection:** Safety glasses, gloves, and impervious clothing.

**Exposure Limits:** Not available.

## Section 9 - Physical and Chemical Properties

**Physical state and appearance:** Liquid.

**Odor:** No data available.

**Taste:** No data available.

**Molecular Weight:** Not applicable.

**Color:** Colorless. Clear.

**pH:** Not available

**Boiling Point:** 219-220 °Cat 13 hPa

**Melting Point:** Not available.

**Critical Temperature:** No data available.

**Specific Gravity:** No data available.

**Vapor Pressure:** No data available.

**Vapor Density:** No data available.

**Volatility:** No data available.

**Odor Threshold:** No data available.  
**Water/Oil Dist. Coeff.:** No data available.  
**Ionicity (in Water) :** No data available.  
**Dispersion Properties :** No data available.  
**Solubility :** No data available.

## Section 10 - Stability and Reactivity

**Chemical Stability:** Stable under recommended storage conditions.  
**Conditions to Avoid:** No data available  
**Incompatibilities with Other Materials:** Strong oxidizing agents  
**Hazardous Decomposition Products:** No data available  
**Hazardous Polymerization:** Has not been reported.

## Section 11 - Toxicological Information

### 11.1 Information on toxicological effects

**Acute toxicity**

no data available

**Inhalation: no data available**

Dermal: no data available

**Skin corrosion/irritation**

no data available

**Serious eye damage/eye irritation**

no data available

**Respiratory or skin sensitization**

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.

**ACGIH:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

**NTP:** No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**OSHA:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity**

No data available.

**Specific target organ toxicity - single exposure**

No data available.

**Specific target organ toxicity - repeated exposure**

No data available.

**Aspiration hazard**

No data available.

**Additional Information**

RTECS: Not available

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

Liver - Irregularities - Based on Human Evidence (Sodium azide)

**Section 12 - Ecological Information**

**Ecotoxicity:** No data available.

**Environmental:** No information available.

**Physical:** No information found.

**Section 13 - Disposal Considerations****Waste Disposal:**

Check with all applicable local, regional, and national laws and regulations. Local regulations may be more stringent than regional or national regulations. Small amounts of this material may be suitable for sanitary sewer or trash disposal.

**Section 14 - Transport Information****US DOT, Canada TDG:**

Not regulated as a hazardous material

**Section 15 - Regulatory Information****SARA 302 Components**

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**

Acute Health Hazard

**California Prop. 65 Components**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

**Section 16 - Additional Information****MSDS Creation Date:** 11-26-14

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