

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision date: 09/22/2014 Version: 1.1

CVISION date: 03/22/2014

1.1. Product identifier	
Product form	: Substance
Trade name	: TRIS-CI, 1.0M SOLUTION, pH 7.4
Product code	: AB14044
1.2. Relevant identified uses of the sul	bstance or mixture and uses advised against
Use of the substance/mixture	: Laboratory use/Manufacturing component/Research
1.3. Details of the supplier of the safet	y data sheet
AmericanBio, Inc. 15 Erie Dr. Natick, MA 01760 - USA T 800.443.0600 - F 508.655.2754 info@americanbio.com - www.americanbio.com	
1.4. Emergency telephone number	
Emergency number	: 855.835.2572 (U.S.) :: 760.602.8703 (Outside U.S.)
SECTION 2: Hazards identification	
2.1. Classification of the substance or	mixture
Classification (GHS-US)	
Skin Irrit. 2 H315	
2.2. Label elements GHS-US labeling	•
Eye Irrit. 2A H319 2.2. Label elements GHS-US labeling Hazard pictograms (GHS-US)	
2.2. Label elements GHS-US labeling Hazard pictograms (GHS-US)	: CHS07
2.2. Label elements GHS-US labeling Hazard pictograms (GHS-US) Signal word (GHS-US)	: Warning
2.2. Label elements GHS-US labeling	 Warning H315 - Causes skin irritation H319 - Causes serious eye irritation
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2.2. Label elements GHS-US labeling Hazard pictograms (GHS-US) Signal word (GHS-US) Hazard statements (GHS-US) Precautionary statements (GHS-US) 2.3. Other hazards	 Warning H315 - Causes skin irritation H319 - Causes serious eye irritation P264 - Wash hands, forearms and face thoroughly after handling P280 - Wear eye protection, protective clothing, protective gloves 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 SECTION 4 on this label) P332+P313 - If skin irritation occurs: Get medical advice/attention P337+P313 - If eye irritation persists: Get medical advice/attention
 2.2. Label elements GHS-US labeling Hazard pictograms (GHS-US) Signal word (GHS-US) Hazard statements (GHS-US) Precautionary statements (GHS-US) Precautionary statements (GHS-US) 2.3. Other hazards No additional information available 	 Warning H315 - Causes skin irritation H319 - Causes serious eye irritation P264 - Wash hands, forearms and face thoroughly after handling P280 - Wear eye protection, protective clothing, protective gloves 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 SECTION 4 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
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3.1.SubstanceTrade name

: TRIS-CI, 1.0M SOLUTION, pH 7.4

Name	Product identifier	%	Classification (GHS-US)
water, reagent grade, usp purified	(CAS No) 7732-18-5	85 - 95	Not classified

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Name	Product identifier	%	Classification (GHS-US)
tris(hydroxymethyl)aminomethane	(CAS No) 77-86-1	10 - 15	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335

Full text of H-phrases: see section 16

Full text of H-phrases, see section 16	
3.2. Mixture	
Not applicable	
SECTION 4: First aid measures	
4.1. Description of first aid measures	
First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Assure fresh air breathing. Allow the victim to rest.
First-aid measures after skin contact	: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Consult a doctor/medical service. Get medical advice/attention. Specific treatment (see Consult a doctor/medical service on this label).
First-aid measures after eye contact	 Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Get medical advice/attention.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.
4.2. Most important symptoms and ef	ifects, both acute and delayed
Symptoms/injuries after skin contact	: Causes skin irritation.
Symptoms/injuries after eye contact	: Causes serious eye irritation.
4.3. Indication of any immediate medi	ical attention and special treatment needed
No additional information available	
SECTION 5: Firefighting measures	S
5.1. Extinguishing media	
suitable extinguishing media	: Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media	: Do not use a heavy water stream.
5.2. Special hazards arising from the	substance or mixture
No additional information available	
5.3. Advice for firefighters	
Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.
SECTION 6: Accidental release me	easures
6.1. Personal precautions, protective	equipment and emergency procedures
6.1.1. For non-emergency personnel	
Emergency procedures	: Evacuate unnecessary personnel.
6.1.2. For emergency responders	
Protective equipment	: Equip cleanup crew with proper protection.
Emergency procedures	: Ventilate area.
6.2. Environmental precautions	
-	otify authorities if liquid enters sewers or public waters.
6.3. Methods and material for contain	ment and cleaning up
Methods for cleaning up	 Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.
6.4. Reference to other sections	

See Heading 8. Exposure controls and personal protection.

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SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Precautions for safe handling	: Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work. Provide good ventilation in process area to prevent formation of vapor.
Hygiene measures	: Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work.
7.2. Conditions for safe storage, including	ng any incompatibilities
Storage conditions	: Keep only in the original container in a cool, well ventilated place away from : Direct sunlight. Keep container closed when not in use.
Incompatible products	: Strong bases. strong acids.
Incompatible materials	: Sources of ignition. Direct sunlight.
7.3. Specific end use(s)	
No additional information available	

8: Exposure contro	

8.1. **Control parameters**

No additional information available

8.2. Exposure controls	
Personal protective equipment	: Avoid all unnecessary exposure.
Hand protection	: Wear protective gloves.
Eye protection	: Chemical goggles or safety glasses.
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: Wear approved mask.
Other information	: When using, do not eat, drink or smoke.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and	I chemical properties
Physical state	: Liquid
Color	: Colorless.
Odor	: characteristic.
Odor threshold	: No data available
рН	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Self ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosive limits	: No data available
0.2 Other information	

9.2. **Other information**

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SECTIO	ON 10: Stability and reactivity
10.1.	Reactivity
No additi	onal information available
10.2.	Chemical stability
Not estat	blished.
10.3.	Possibility of hazardous reactions
Not estat	blished.
10.4.	Conditions to avoid
Direct su	nlight. Extremely high or low temperatures.
10.5.	Incompatible materials
strong ac	ids. Strong bases.
10.6.	Hazardous decomposition products
	rbon monoxide. Carbon dioxide.
SECTION	DN 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

: Not classified

tris(hydroxymethyl)aminomethane (77-86-1)	
LD50 oral rat	5900 mg/kg (Rat)
Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified
Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.
Symptoms/injuries after skin contact	: Causes skin irritation.
Symptoms/injuries after eye contact	: Causes serious eye irritation.

SECTION 12: Ecological information

12.1. Toxicity

No additional information available	on available	information	additional	No
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12.2. Persistence and degradability		
TRIS-CI, 1.0M SOLUTION, pH 7.4		
Persistence and degradability	Not established.	
tris(hydroxymethyl)aminomethane (77-86-	1)	
Persistence and degradability	Biodegradability in water: no data available.	
2.3. Bioaccumulative potential		
TRIS-CI, 1.0M SOLUTION, pH 7.4		
Bioaccumulative potential	Not established.	
tris(hydroxymethyl)aminomethane (77-86-1)		
Log Pow	-1.56	
Bioaccumulative potential	Bioaccumulation: not applicable.	

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12.4. **Mobility in soil** No additional information available 12.5. Other adverse effects : Avoid release to the environment. Other information SECTION 13: Disposal considerations Waste treatment methods 13.1. Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Ecology - waste materials : Avoid release to the environment. **SECTION 14: Transport information** In accordance with DOT No dangerous good in sense of transport regulations **Additional information** Other information : No supplementary information available. ADR Transport document description : UN N/A Packing group (ADR) : N/A Hazard identification number (Kemler No.) : N/A Classification code (ADR) : N/A Transport by sea No additional information available Air transport No additional information available **SECTION 15: Regulatory information** 15.1. US Federal regulations water, reagent grade, usp purified (7732-18-5) Listed on the United States TSCA (Toxic Substances Control Act) inventory tris(hydroxymethyl)aminomethane (77-86-1) Listed on the United States TSCA (Toxic Substances Control Act) inventory 15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP] Not classified

Classification according to Directive 67/548/EEC or 1999/45/EC Not classified

15.2.2. National regulations

No additional information available

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15.3. US State regulations

No additional information available

SECTION 16: Other information

Other information

: None.

Full text of H-phrases: see section 16:

Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation

SDS US (GHS HazCom 2012)

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