according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: August 23, 2020

1 Identification		
Product identifier		
 Trade name: <u>Trishydroxymethylaminomethane</u> Product code: TS5050 CAS Number: 77-86-1 		
 Recommended use and restriction on use Recommended use: Laboratory chemicals Restrictions on use: No relevant information available. 		
 Details of the supplier of the Safety Data Sheet Manufacturer/Supplier: AquaPhoenix Scientific, Inc. 860 Gitts Run Road Hanover, PA 17331 USA Tel +1 (717)632-1291 Toll-Free: (866)632-1291 info@aquaphoenixsci.com Distributor: AquaPhoenix Scientific 860 Gitts Run Road, Hanover, PA 17331 (717) 632-1291 		
• Emergency telephone number: ChemTel Inc. (800)255-3924 (North America) +1 (813)248-0585 (International)		

2 Hazard(s) identification

[•] Classification of the substance or mixture

The substance is not classified as hazardous according to the Globally Harmonized System (GHS).

- [•] Label elements
- · GHS label elements None.
- · Hazard pictograms: Not regulated.
- · Signal word:
- None.
- None.
- · Hazard statements: None.
- · Precautionary statements: None.

• Other hazards There are no other hazards not otherwise classified that have been identified.

3 Composition/information on ingredients

[•] Chemical characterization: Substances

- · CAS No. Description
- 77-86-1 Tris(hydroxymethyl)aminomethane

· Additional information:

(Cont'd. on page 2)

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: August 23, 2020

Trade name: Trishydroxymethylaminomethane

(Cont'd. of page 1)

For the listed ingredient(s), the identity and/or exact percentage(s) are being withheld as a trade secret. For the wording of the listed Hazard Statements, refer to section 16.

4 First-aid measures

[•] Description of first aid measures

· General information: No special measures required.

• After inhalation: Supply fresh air; consult doctor in case of complaints.

· After skin contact:

Brush off loose particles from skin.

Immediately rinse with water.

If skin irritation is experienced, consult a doctor.

After eye contact:

Remove contact lenses if worn.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- After swallowing: Do not induce vomiting. Seek medical attention.
- Most important symptoms and effects, both acute and delayed:

Gastric or intestinal disorders when ingested.

- Nausea in case of ingestion.
- · Danger: Danger of gastric perforation.
- Indication of any immediate medical attention and special treatment needed:
- If medical advice is needed, have product container or label at hand.

5 Fire-fighting measures

- Extinguishing media
- Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- For safety reasons unsuitable extinguishing agents: No relevant information available.
- Special hazards arising from the substance or mixture
- Formation of toxic gases is possible during heating or in case of fire.
- Advice for firefighters
- · Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

6 Accidental release measures

• Personal precautions, protective equipment and emergency procedures Ensure adequate ventilation.

[•] Environmental precautions

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Methods and material for containment and cleaning up

Absorb with non-combustible liquid-binding material (sand, diatomite, acid binders, universal binders). Dispose of the collected material according to regulations.

Reference to other sections

See Section 7 for information on safe handling.

(Cont'd. on page 3)

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: August 23, 2020

Trade name: Trishydroxymethylaminomethane

(Cont'd. of page 2)

See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

7 Handling and storage

[·] Handling

· Precautions for safe handling:

Use only in well ventilated areas.

Avoid splashes or spray in enclosed areas.

Prevent formation of dust.

· Information about protection against explosions and fires: No special measures required.

[•] Conditions for safe storage, including any incompatibilities

• Requirements to be met by storerooms and receptacles: Store in a cool location.

- · Information about storage in one common storage facility: Store away from foodstuffs.
- Further information about storage conditions:

Keep containers tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

Specific end use(s) No relevant information available.

8 Exposure controls/personal protection

[•] Control parameters

Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Exposure controls

· General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

· Engineering controls: Provide adequate ventilation.

· Breathing equipment:

Not required under normal conditions of use.

For large spills, respiratory protection may be advisable.

Protection of hands:



Protective gloves

Material of gloves

Butyl rubber, BR Fluorocarbon rubber (Viton) Natural rubber, NR Nitrile rubber, NBR Neoprene gloves Rubber gloves Sensibilization by the components in the glove materials is possible.

(Cont'd. on page 4)

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: August 23, 2020

(Cont'd. of page 3)

Trade name: Trishydroxymethylaminomethane

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection:



Safety glasses

Follow relevant national guidelines concerning the use of protective eyewear.

 \cdot Body protection: Protective work clothing

· Limitation and supervision of exposure into the environment No special requirements.

· Risk management measures No special requirements.

9 Physical and chemical properties

Appearance:		
Form:	Solid	
Color:	White	
Odor:	Not determined.	
Odor threshold:	Not determined.	
pH-value:	Not applicable.	
Melting point/Melting range:	Not determined.	
Boiling point/Boiling range:	Not determined.	
Flash point:	The product is not flammable.	
Flammability (solid, gaseous):	Not determined.	
Auto-ignition temperature:	Not determined.	
Decomposition temperature:	Not determined.	
Danger of explosion:	Product does not present an explosion hazard.	
Explosion limits		
Lower:	Not determined.	
Upper:	Not determined.	
Oxidizing properties:	Not determined.	
Vapor pressure:	Not determined.	
Density:		
Relative density:	Not determined.	
Vapor density:	Not applicable.	
Evaporation rate:	Not applicable.	
Solubility in / Miscibility with		
Water:	Fully miscible.	
Partition coefficient (n-octanol/wa	ter): Not determined.	
Viscosity		

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: August 23, 2020

Trade name: Trishydroxymethylaminomethane

(Cont'd. of page 4)

Dynamic: Kinematic: Other information Not applicable. Not applicable. No relevant information available.

10 Stability and reactivity

· Reactivity: No relevant information available.

Chemical stability: Stable under normal temperatures and pressures.

Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

Possibility of hazardous reactions

Toxic fumes may be released if heated above the decomposition point.

Conditions to avoid

Direct sunlight.

Excessive heat.

Moisture.

· Incompatible materials No relevant information available.

· Hazardous decomposition products

Under fire conditions only:

Carbon monoxide and carbon dioxide

11 Toxicological information

· Information on toxicological effects

· Acute toxicity: Based on available data, the classification criteria are not met.

- · LD/LC50 values that are relevant for classification: None.
- Primary irritant effect:

· On the skin: Based on available data, the classification criteria are not met.

· On the eye: Based on available data, the classification criteria are not met.

• Sensitization: Based on available data, the classification criteria are not met.

· IARC (International Agency for Research on Cancer):

Substance is not listed.

• NTP (National Toxicology Program):

Substance is not listed.

OSHA-Ca (Occupational Safety & Health Administration):

Substance is not listed.

Probable route(s) of exposure:

Ingestion.

Inhalation.

Eye contact.

Skin contact.

• Acute effects (acute toxicity, irritation and corrosivity): From product as supplied: None.

• Repeated dose toxicity: From product as supplied: None.

· Germ cell mutagenicity: Based on available data, the classification criteria are not met.

· Carcinogenicity: Based on available data, the classification criteria are not met.

(Cont'd. on page 6)

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: August 23, 2020

Trade name: Trishydroxymethylaminomethane

(Cont'd. of page 5)

- Reproductive toxicity: Based on available data, the classification criteria are not met.
- **STOT-single exposure:** Based on available data, the classification criteria are not met.
- STOT-repeated exposure: Based on available data, the classification criteria are not met.
- Aspiration hazard: Based on available data, the classification criteria are not met.

12 Ecological information

[·] Toxicity

- · Aquatic toxicity No relevant information available.
- Persistence and degradability No relevant information available.
- · Bioaccumulative potential: No relevant information available.
- Mobility in soil: No relevant information available.
- [•] Additional ecological information
- · General notes: Not known to be hazardous to water.
- Other adverse effects No relevant information available.

13 Disposal considerations

· Waste treatment methods

· Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

[·] Uncleaned packagings

• Recommendation: Disposal must be made according to official regulations.

Not regulated.
Not regulated.
Not regulated.
Not regulated.
Not applicable.
Not applicable.
-

(Cont'd. on page 7)

Safety, health and environmental regulations/legislation specific for the substance or

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: August 23, 2020

Trade name: Trishydroxymethylaminomethane

(Cont'd. of page 6)

15 Regulatory information

mixture
· United States (USA)
· SARA
· Section 302 (extremely hazardous substances):
Substance is not listed.
· Section 313 (Specific toxic chemical listings):
Substance is not listed.
· TSCA (Toxic Substances Control Act)
Substance is not listed.
· Proposition 65 (California)
· Chemicals known to cause cancer:
Substance is not listed.
· Chemicals known to cause developmental toxicity for females:
Substance is not listed.
· Chemicals known to cause developmental toxicity for males:
Substance is not listed.
· Chemicals known to cause developmental toxicity:
Substance is not listed.
· EPA (Environmental Protection Agency):
Substance is not listed.
· IARC (International Agency for Research on Cancer):
Substance is not listed.
· Canadian Domestic Substances List (DSL):

Substance is not listed.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Abbreviations and acronyms:
 ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
 IMDG: International Maritime Code for Dangerous Goods
 DOT: US Department of Transportation
 IATA: International Air Transport Association
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 OSHA: Occupational Safety & Health Administration
 Sources
 Website, European Chemicals Agency (echa.europa.eu)
 Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/overview/home.do)
 Amount of the service of the term of term of the term of term of the term of the term of t

(Cont'd. on page 8)

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: August 23, 2020

Trade name: Trishydroxymethylaminomethane

(Cont'd. of page 7)

Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org) Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6 Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5. Safety Data Sheets, Individual Manufacturers SDS Prepared by: ChemTel 1305 North Florida Avenue Tampa, Florida USA 33602-2902 Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573 Website: www.chemtel.com