SAFETY DATA SHEET

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: CHLORINE TOTAL-TMB

Pyxis Laboratories, Inc.

21242 Spell Circle Drive,
Tomball TX, 77375

www.pyxis-lab.com

+1 866-203-8397

Emergency Phone Number

CHEMTREC

1-800-262-8200

2. HAZARDS IDENTIFICATION

GHS Ratings:

Corrosive to metals	Category 1	H290
Skin corrosion	Category 1B	H314.
Specific target organ toxicity - single exposure	Category 3	Respiratory system, H335

GHS Hazards

H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H335	May cause respiratory irritation

GHS Precautions

P260	Do not breathe dust/ fume/ gas/ mist/ vapors/ spray
P280	Wear protective gloves/protective
P303 + P361 +P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Supplemental Hazard	none

Signal Word: **Warning**

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS No	Molecular Wt.	GHS classification	Percent range (units: weight/weight)
Glycerol	56-81-5	92.09	Not a hazardous substance	10-20%

3,3',5,5'-Tetramethylbenzidine dihydrochloride	64285-73-0	313.27	Corrosive to metals (Category 1), H290 Skin corrosion (Category 1B), H314 Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335	＜1%
Potassium chloride	7447-40-7	74.55	Not a hazardous substance	10-20%
Sulfuric acid	7664-93-9	98.07	Acute toxicity - Oral (Category 4) Skin corrosion (Category 2), H316 Serious eye damage/eye irritation Category 2A H319	5-15%

4. FIRST AID MEASURES

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance.
If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact
Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.
In case of eye contact
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIRE FIGHTING MEASURE

Extinguishing media
Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Special hazards arising from the substance or mixture
Carbon oxides, Sulphur oxides, Nitrogen oxides (NOx), Hydrogen chloride gas
Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.
Further information
No data available

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures
Wear respiratory protection. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
For personal protection see section 8.
Environmental precautions
Do not let product enter drains.
Methods and materials for containment and cleaning up
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.
Reference to other sections
For disposal see section 13.

7. HANDLING AND STORAGE

Handling:
Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2
Storage:
Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure controls

Appropriate engineering controls
General industrial hygiene practice.
Personal protective equipment
Eye/face protection
Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Skin protection
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves must satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.
Full contact
Material: Nitrile rubber
Splash contact
Material: Nitrile rubber
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.
Body Protection
Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Respiratory protection
Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and
approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Control of environmental exposure:
Do not let product enter drains

9. PHYSICAL AND CHEMICAL PROPERTIES

a) Appearance Form: Liquid	k) Vapor pressure: No data available
b) Odor: No data available	l) Vapor density: No data available
c) Odor Threshold: No data available	m) Relative density: No data available
d) pH: No data available	n) Water solubility: dissolve in water
e) Melting point/freezing point: No data available	o) Partition coefficient: n octanol/water: No data available p) Auto-ignition temperature: No data available
f) Initial boiling point and boiling range: No data available g) Flash point: No data available	q) Decomposition temperature: No data available
h) Evaporation rate: No data available	r) Viscosity： No data available
i) Flammability (solid, gas): No data available	s) Explosive properties： No data available
j) Upper/lower flammability or explosive limits: No data available	t) Oxidizing properties： No data available

10. STABILITY AND REACTIVITY

Chemical stability
Stable under recommended storage conditions.
Reactivity
Strong oxidizing agents
Possibility of hazardous reactions
No data available
Conditions to avoid
No data available
Incompatible materials
Strong oxidizing agents, Strong bases
Hazardous decomposition products
In the event of fire: see section 5**. Other** decomposition products - No data available

11. TOXICOLOGICAL INFORMATIO

Acute toxicity
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.
Reproductive toxicity
No data available
Specific target organ toxicity - single exposure
May cause respiratory irritation.
Specific target organ toxicity - repeated exposure
No data available
Aspiration hazard
No data available
Additional Information
RTECS: Not available
burning sensation, Cough, wheezing, laryngitis, Shortness of breath, spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

12. ECOLOGICAL INFORMATION

Toxicity
No data available
Persistence and degradability
No data available
Bioaccumulative potential
No data available
Mobility in soil
No data available
Results of PBT and vPvB assessment
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
Other adverse effects
No data available

13. DISPOSAL CONSIDERATIONS

Product:
Must be disposed of in accordance with local and national regulations. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.
Contaminated Packaging:
Must be disposed of in accordance with local and national regulations. Dispose of as unused product.

14. TRANSPORT INFORMATION

Agency	Proper Shipping Name	UN Number Packing Group Hazard Class
DOT	Not Regulated, as it is not dangerous goods	

15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 453/2010.
Safety, health and environmental regulations/legislation specific for the substance or mixture
Chemical Safety Assessment
For this product a chemical safety assessment was not carried out.

16. OTHER INFORMATION

Disclaimer: All information, recommendations and suggestions appearing herein are based upon sources believed to be reliable: However, it is the user's responsibility to determine the safety, toxicity and suitability for its own use of this product. Pyxis Lab, Inc. does not assume any liability arising out of the use by others of this product.