



MATERIAL SAFETY DATA SHEET

www.britisscientific.com

Issue Date:

1- Chemical Product Information and Company Identification.

Product Name: : Thioacetic acid reference standard, AnStan[®].
Synonym: : Ethanethioic Acid.
Product code: : BS14400.
CAS Number: : 507-09-5.
Company Name: : Briti Scientific.
Company Address: : Plot No:78/B/13, SY-79,Phase-VI, Jeedimetla,Hyderabad-500 055.
Telangana, India.

Section 2- Composition / Information on Ingredients.

CAS No.	Chemical Name	Mol. Formula
507-09-5.	Ethanethioic Acid.	C ₂ H ₄ OS.

Section 3- Hazards Identification.

Classification

Classification under 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable liquids: Category 2
Acute oral toxicity: Category 3
Serious Eye Damage/Eye Irritation: Category 1
Skin Sensitization: Category 1
Specific target organ toxicity (single exposure): Category 3
Target Organs - Respiratory system.

Label Elements

Signal Word

Danger

Hazard Statements

Highly flammable liquid and vapor.
Toxic if swallowed.
May cause an allergic skin reaction.
Causes serious eye damage.
May cause respiratory irritation.





Precautionary Statements

Prevention

- Wash face, hands and any exposed skin thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Wear protective gloves/protective clothing/eye protection/face protection.
- Avoid breathing dust/fume/gas/mist/vapors/spray.
- Contaminated work clothing should not be allowed out of the workplace.
- Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
- Keep container tightly closed.
- Ground/bond container and receiving equipment.
- Use explosion-proof electrical/ventilating/lighting/equipment.
- Use only non-sparking tools.
- Take precautionary measures against static discharge.

Skin

- If skin irritation or rash occurs: Get medical advice/attention.
- Wash contaminated clothing before reuse.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a POISON CENTER or doctor/physician.

Ingestion

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

Rinse mouth

Fire

In case of fire: Use CO₂, dry chemical, or foam for extinction.

Storage

- Store locked up.
- Store in a well-ventilated place. Keep cool.

Disposal

Dispose of contents/container to an approved waste disposal plant.





Hazards not otherwise classified (HNOC)

Lachrymator (substance which increases the flow of tears).

Stench

Section 4- First Aid Measures.

General Advice: Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

Eye Contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention if symptoms occur.

Skin Contact: Wash off immediately with plenty of water for at least 15 minutes. Get medical attention if symptoms occur.

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.

Ingestion: Do NOT induce vomiting. Get medical attention.

Most important symptoms and effects: Difficulty in breathing. Causes burns by all exposure routes. May cause allergic skin reaction. Causes severe eye damage. Causes eye burns. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting: Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation: Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, light headedness, chest pain, muscle pain or flushing.

Notes to Physician: Treat symptomatically

Section 5- Fire Fighting Measures.

Suitable Extinguishing Media: Water spray, carbon dioxide (CO₂), dry chemical, alcohol-resistant foam. Water mist maybe used to cool closed containers.

Unsuitable Extinguishing Media: No information available.

Flash Point: 18°C / 64.4°F.

Method - No information available.

Autoignition Temperature: 427°C / 800°F.

Explosion Limits

Upper 16%

Lower 5.4%

Sensitivity to Mechanical Impact: No information available.

Sensitivity to Static Discharge: No information available.

Specific Hazards Arising from the Chemical:

Flammable. Vapors may travel to source of ignition and flash back. Will form explosive mixtures with air. Thermal decomposition can lead to release of irritating gases and vapors. In the event of fire





and/or explosion do not breathe fumes. Containers may explode when heated. Vapors may form explosive mixtures with air.

Hazardous Combustion Products: Carbon monoxide (CO). Carbon dioxide (CO₂), Sulfur oxides. Sulfides. Thermal decomposition can lead to release of irritating gases and vapors.

Protective Equipment and Precautions for Firefighters

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

NFPA

Health	Flammability	Instability	Physical hazards
3	3	0	N/A

Section 6- Accidental Release Measures.

Personal Precautions: Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation.

Environmental Precautions: Should not be released into the environment. See Section 12 for additional Ecological Information.

Methods for Containment and Clean Up:

Keep in suitable, closed containers for disposal. Soak up with inert absorbent material. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

Section 7- Handling and Storage.

Handling: Do not breathe mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Use only under a chemical fume hood. Wear personal protective equipment/face protection. Do not ingest. If swallowed then seek immediate medical assistance. Keep away from open flames, hot surfaces and sources of ignition. Use only non-sparking tools. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Take precautionary measures against static discharges

Storage: Keep in a dry place. Keep container tightly closed. Keep away from heat, sparks and flame. Flammables area. Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Keep containers tightly closed in a cool, well-ventilated place. Refer product specification and/or label for storage temperature range. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers. To maintain product quality: Keep refrigerated.

Section 8- Exposure Control/Personal Protection.

Exposure Guidelines: This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Engineering Measures: Ensure adequate ventilation, especially in confined areas. Ensure that eye wash stations and safety showers are close to the workstation location. Use explosion-proof electrical/ventilating/lighting/equipment.





Personal Protective Equipment:

Eye/face Protection: Tight sealing safety goggles. Face protection shield.

Skin and body protection: Wear appropriate protective gloves and clothing to prevent skin exposure. Impervious clothing. Chemical resistant apron. Boots. Impervious gloves.

Respiratory Protection: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Hygiene Measures: Keep away from food, drink and animal feeding stuffs. When using do not eat, drink or smoke. Contaminated work clothing should not be allowed out of the workplace. Provide regular cleaning of equipment, work area and clothing. Avoid contact with skin, eyes or clothing. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wear suitable gloves and eye/face protection.

Section 9- Physical and Chemical Properties.

Appearance: Colorless to Light orange to Yellow clear liquid.

Odor: Stench.

Odor Threshold: No information available.

pH: No information available.

Melting Point/Range: -17°C.

Boiling Point/Range: 93°C.

Flash Point: 18°C / 64.4°F.

Evaporation Rate: No information available.

Flammability (solid,gas): Not applicable.

Flammability or explosive limits

Upper 16%

Lower 5.4%

Vapor Pressure: No information available.

Density: 1.065 g/ml.

Solubility: Soluble in water.

Partition coefficient; n-octanol/water: No data available.

Autoignition Temperature: 427°C / 800°F.

Decomposition Temperature: No data available.

Viscosity: No data available.

Molecular: C₂H₄OS.

Molecular Weight: 76.11 g/mol.

Section 10- Stability and Reactivity.

Reactive Hazard: None known, based on information available.

Stability: Stable under normal conditions.





Conditions to Avoid: Incompatible products. Keep away from open flames, hot surfaces and sources of ignition.

Incompatible Materials: Strong bases, Metals.

Hazardous Decomposition Products: Carbon monoxide (CO), Carbon dioxide (CO₂), Sulfur oxides, Sulfides, Thermal decomposition can lead to release of irritating gases and vapors.

Hazardous Polymerization: Hazardous polymerization does not occur.

Hazardous Reactions: None under normal processing.

Section 11- Toxicological Information.

Acute Toxicity

Product Information: No acute toxicity information is available for this product.

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Thioacetic acid	200 - 350 mg/kg (Rat)	Not listed	Not listed

Toxicologically Synergistic Products: No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation: CAUSES (SEVERE) EYE BURNS.

Sensitization: May cause sensitization by skin contact.

Mutagenic Effects: No information available.

Reproductive Effects: No information available.

Developmental Effects: No information available.

Teratogenicity: No information available.

STOT - single exposure- Respiratory system.

STOT - repeated exposure None known

Aspiration hazard: No information available.

Symptoms / effects, both acute and delayed:

Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting: Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation: Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, light headedness, chest pain, muscle pain or flushing.

Endocrine Disruptor Information: No information available.

Other Adverse Effects: The toxicological properties have not been fully investigated.

Section 12- Ecological Information.

Ecotoxicity: Do not empty into drains.

Persistence and Degradability: Soluble in water Persistence is unlikely based on information available.

Bioaccumulation/ Accumulation: No information available.





Mobility: Will likely be mobile in the environment due to its water solubility.

Section 13- Disposal Considerations.

Waste Disposal Methods: Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

Section 14- Transport Information.

DOT

UN-No: UN2436
Proper Shipping Name: THIOACETIC ACID
Hazard Class: 3
Packing Group: II

TDG

UN-No: UN2436
Proper Shipping Name: THIOACETIC ACID
Hazard Class: 3
Packing Group: II

IATA

UN-No: UN2436
Proper Shipping Name: THIOACETIC ACID
Hazard Class: 3
Packing Group: II

IMDG/IMO

UN-No: UN2436
Proper Shipping Name: THIOACETIC ACID
Hazard Class: 3
Packing Group: II

Section 15- Regulatory Information.

Legend:

TSCA - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

TSCA 12(b) - Notices of Export Not applicable

U.S. Federal Regulations

SARA 313: Not applicable

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act) Not applicable.

Clean Air Act: Not applicable.

OSHA - Occupational Safety and





Health Administration: Not applicable.

CERCLA: Not applicable.

California Proposition 65: This product does not contain any Proposition 65 chemicals.

Section 16- Other Information.

Briti Scientific provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.

