



Material Safety Data Sheet

<p>NFPA</p> 	<p>HMIS</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="background-color: #00FFFF;">Health Hazard</td> <td style="text-align: center; font-weight: bold;">2</td> </tr> <tr> <td style="background-color: #FFC0CB;">Fire Hazard</td> <td style="text-align: center; font-weight: bold;">1</td> </tr> <tr> <td style="background-color: #FFFF00;">Reactivity</td> <td style="text-align: center; font-weight: bold;">0</td> </tr> </table>	Health Hazard	2	Fire Hazard	1	Reactivity	0	<p>Personal Protective Equipment</p>  <p style="text-align: center;">See Section 15.</p>
Health Hazard	2							
Fire Hazard	1							
Reactivity	0							

Section 1. Chemical Product and Company Identification		<i>Page Number: 1</i>
Common Name/Trade Name	Thioacetamide	Catalog Number(s). T1035, T1042
Manufacturer	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248	CAS# 62-55-5
Commercial Name(s)	Not available.	RTECS AC8925000
Synonym	Ethanethioamide; Acetothioamide; Thiacetamide; Thioacetimidic acid	TSCA TSCA 8(b) inventory: Thioacetamide
Chemical Name	Acetamide, thio-	CI# Not available.
Chemical Family	Not available.	<p style="text-align: center; margin: 0;"><u>IN CASE OF EMERGENCY</u> <u>CHEMTREC (24hr) 800-424-9300</u> CALL (310) 516-8000</p>
Chemical Formula	C ₂ H ₅ N-S	
Supplier	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248	

Section 2. Composition and Information on Ingredients					
Name	CAS #	<i>Exposure Limits</i>			% by Weight
		TWA (mg/m ³)	STEL (mg/m ³)	CEIL (mg/m ³)	
1) Thioacetamide	62-55-5				100
Toxicological Data on Ingredients	Thioacetamide: ORAL (LD50): Acute: 301 mg/kg [Rat].				

Section 3. Hazards Identification	
Potential Acute Health Effects	Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of skin contact (permeator).
Potential Chronic Health Effects	<p>CARCINOGENIC EFFECTS: Classified 2B (Possible for human.) by IARC. Classified 2 (Some evidence.) by NTP.</p> <p>MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. Mutagenic for bacteria and/or yeast.</p> <p>TERATOGENIC EFFECTS: Not available.</p> <p>DEVELOPMENTAL TOXICITY: Not available.</p> <p>The substance may be toxic to liver. Repeated or prolonged exposure to the substance can produce target organs damage.</p>

Section 4. First Aid Measures

Eye Contact	Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention.
Skin Contact	In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.
Serious Skin Contact	Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Serious Inhalation	Not available.
Ingestion	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.
Serious Ingestion	Not available.

Section 5. Fire and Explosion Data

Flammability of the Product	May be combustible at high temperature.
Auto-Ignition Temperature	Not available.
Flash Points	Not available.
Flammable Limits	Not available.
Products of Combustion	These products are carbon oxides (CO, CO ₂), nitrogen oxides (NO, NO ₂ ...).
Fire Hazards in Presence of Various Substances	Slightly flammable to flammable in presence of heat.
Explosion Hazards in Presence of Various Substances	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.
Fire Fighting Media and Instructions	SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.
Special Remarks on Fire Hazards	As with most organic solids, fire is possible at elevated temperatures
Special Remarks on Explosion Hazards	Not available.

Section 6. Accidental Release Measures

Small Spill	Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.
Large Spill	Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

Section 7. Handling and Storage

Precautions	Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe dust. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents, acids, alkalis.
Storage	Keep container tightly closed. Keep container in a cool, well-ventilated area. Do not store above 8°C (46.4°F). Refrigerate.

Section 8. Exposure Controls/Personal Protection

Engineering Controls	Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
Personal Protection	Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.
Personal Protection in Case of a Large Spill	Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
Exposure Limits	Not available.

Section 9. Physical and Chemical Properties

Physical state and appearance	Solid. (Crystals solid.)	Odor	Slight odor of mercaptans. Sulfurous.
Molecular Weight	75.13 g/mole	Taste	Not available.
pH (1% soln/water)	Not available.	Color	White to yellowish.
Boiling Point	Not available.		
Melting Point	113°C (235.4°F) - 114 C.		
Critical Temperature	Not available.		
Specific Gravity	Not available.		
Vapor Pressure	Not applicable.		
Vapor Density	Not available.		
Volatility	Not available.		
Odor Threshold	Not available.		
Water/Oil Dist. Coeff.	The product is more soluble in water; log(oil/water) = -0.3		
Ionicity (in Water)	Not available.		
Dispersion Properties	See solubility in water.		
Solubility	Soluble in cold water. Miscible in petroleum ether. Sparingly soluble in ether. Solubility in ethanol: 26.4 g/100 g. Solubility in water: 16300 mg/l @ 25 deg. C.		

Section 10. Stability and Reactivity Data

Stability	The product is stable.
Instability Temperature	Not available.
Conditions of Instability	Excess heat, incompatible materials
Incompatibility with various substances	Reactive with oxidizing agents, acids, alkalis.
Corrosivity	Non-corrosive in presence of glass.
Special Remarks on Reactivity	Not available.
Special Remarks on Corrosivity	Not available.
Polymerization	Will not occur.

Section 11. Toxicological Information

Routes of Entry	Absorbed through skin. Inhalation. Ingestion.
Toxicity to Animals	Acute oral toxicity (LD50): 301 mg/kg [Rat].
Chronic Effects on Humans	CARCINOGENIC EFFECTS: Classified 2B (Possible for human.) by IARC. Classified as anticipated carcinogen by NTP. MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. Mutagenic for bacteria and/or yeast. May cause damage to the following organs: liver.
Other Toxic Effects on Humans	Hazardous in case of skin contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of skin contact (permeator).
Special Remarks on Toxicity to Animals	Not available.
Special Remarks on Chronic Effects on Humans	May affect genetic material (mutagenic). May cause cancer. May cause adverse reproductive effects and birth defects (teratogenic).
Special Remarks on other Toxic Effects on Humans	Acute Potential Health Effects: Skin: Causes skin irritation. It may be absorbed through the skin and cause symptoms similar to that of ingestion Eyes: Causes eye irritation. Inhalation: May cause respiratory tract nose, throat, lungs) irritation causing coughing. Ingestion: Harmful if swallowed. It may cause diarrhea and painful or difficult urination. It may affect the liver and cause liver damage. Contact with stomach acids can liberate toxic hydrogen sulfide gas. Hydrogen Sulfide can cause diarrhea, nausea, excessive salivation, and can affect the central nervous system producing headache, weakness dizziness, excitement, staggering gait. Chronic Potential Health Effects: Ingestion: Prolonged or repeated ingestion may affect the liver (hepatitis, cirrhosis, hepatocellular necrosis), urinary system, blood (changes in serum composition), metabolism (loss appetite, weight loss), endocrine system (thymus, spleen). Skin: Prolonged or repeated skin contact can result in moderate to heavy skin irritation.

Section 12. Ecological Information

Ecotoxicity	Not available.
BOD5 and COD	Not available.
Products of Biodegradation	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
Toxicity of the Products of Biodegradation	The products of degradation are less toxic than the product itself.

Continued on Next Page

Special Remarks on the Products of Biodegradation Not available.

Section 13. Disposal Considerations

Waste Disposal Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14. Transport Information

DOT Classification Not a DOT controlled material (United States).

Identification Not applicable.

Special Provisions for Transport Not applicable.

DOT (Pictograms)



Section 15. Other Regulatory Information and Pictograms

Federal and State Regulations

California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute: Thioacetamide
 California prop. 65 (no significant risk level): Thioacetamide: 0.0001 mg/day (value)
 California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: Thioacetamide
 Connecticut hazardous material survey.: Thioacetamide
 Illinois toxic substances disclosure to employee act: Thioacetamide
 Illinois chemical safety act: Thioacetamide
 New York release reporting list: Thioacetamide
 Pennsylvania RTK: Thioacetamide
 Minnesota: Thioacetamide
 Massachusetts RTK: Thioacetamide
 Massachusetts spill list: Thioacetamide
 New Jersey: Thioacetamide
 New Jersey spill list: Thioacetamide
 Louisiana spill reporting: Thioacetamide
 TSCA 8(b) inventory: Thioacetamide
 SARA 313 toxic chemical notification and release reporting: Thioacetamide
 CERCLA: Hazardous substances.: Thioacetamide: 10 lbs. (4.536 kg)

California Proposition 65 Warnings California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: Thioacetamide

Other Regulations OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).
 EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

Other Classifications	WHMIS (Canada)	The classification of this product has not been validated yet by the Service du repertoire toxicologique. However, the WHMIS can be expected to be CLASS D-1B: Material causing immediate and serious toxic effects (TOXIC). CLASS D-2A: Material causing other toxic effects (VERY TOXIC).	
	DSCL (EEC)	R22- Harmful if swallowed. R36/38- Irritating to eyes and skin. R45- May cause cancer. R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.	S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). S53- Avoid exposure - obtain special instructions before use. S61- Avoid release to the environment. Refer to special instructions/Safety data sheets.

HMIS (U.S.A.)

Health Hazard	2
Fire Hazard	1
Reactivity	0
Personal Protection	E

National Fire Protection Association (U.S.A.)

Health



Flammability

Reactivity

Specific hazard

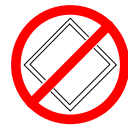
WHMIS (Canada) (Pictograms)



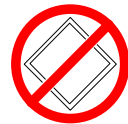
DSCL (Europe) (Pictograms)



TDG (Canada) (Pictograms)



ADR (Europe) (Pictograms)



Protective Equipment



Gloves.



Lab coat.



Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.



Splash goggles.

Section 16. Other Information**MSDS Code** T3390**References** Not available.**Other Special Considerations** Not available.

Validated by Sonia Owen on 8/11/2006.

Verified by Sonia Owen.

Printed 9/14/2006.

CALL (310) 516-8000

Notice to Reader

All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum Quality Products, Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.