

**CATER CHEMICALS CORP.**

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THIOACETAMIDE

1. Product Identification

Synonyms: Acetothioamide; ethanethioamide; TAA; Sulfo-amine; thiacetamide

CAS No.: 62-55-5

Molecular Weight: 75.13

Chemical Formula: CH₃CSNH₂

2. Composition/Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
Thioacetamide	62-55-5	99 - 100%	Yes

3. Hazards Identification**Emergency Overview**

WARNING! HARMFUL IF SWALLOWED, INHALED OR ABSORBED THROUGH SKIN. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT. SUSPECT CANCER HAZARD. MAY CAUSE CANCER. Risk of cancer depends on level and duration of exposure. MAY CAUSE LIVER DAMAGE.

Health Rating: 2 - Moderate (Cancer)

Flammability Rating: 1 - Slight

Reactivity Rating: 1 - Slight

Contact Rating: 3 - Severe

Lab Protective Equip: GOGGLES & SHIELD; LAB COAT & APRON; VENT HOOD; PROPER GLOVES

Storage Color Code: Green (General Storage)

Potential Health Effects

Inhalation:

Causes irritation to the respiratory tract. Symptoms may include coughing, shortness of breath. High concentrations can cause pulmonary edema.

Ingestion:

Toxic. Suspected of causing liver damage. Will produce hydrogen sulfide in stomach which can be fatal.

Skin Contact:

Causes irritation to skin. Symptoms include redness, itching, and pain. Can be corrosive. May decompose to hydrogen sulfide on contact with the skin. Decomposition product acetonitrile can be absorbed through the skin.

Eye Contact:

Causes irritation, redness and pain. Can be corrosive to eyes; may decompose to hydrogen sulfide in contact with eye.

Chronic Exposure:

May cause liver damage. Material is a suspected human carcinogen.

Aggravation of Pre-existing Conditions:

No information found.

4. First Aid Measures

Inhalation:

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion:

Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person.

Skin Contact:

Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

Eye Contact:

Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get medical attention.

5. Fire Fighting Measures

Fire:

As with most organic solids, fire is possible at elevated temperatures or by contact with an ignition source.

Explosion:

Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. Do not cut, drill, weld or grind on or near container: explosive hazard.

Fire Extinguishing Media:

Dry chemical, foam or carbon dioxide. Do not use water.

Special Information:

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

6. Accidental Release Measures

Remove all sources of ignition. Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Clean up spills in a manner that does not disperse dust into the air. Use non-sparking tools and equipment. Reduce airborne dust and prevent scattering by moistening with water. Pick up spill for recovery or disposal and place in a closed container. US Regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of reportable quantities. The toll free number for the US Coast Guard National Response Center is (800) 424-8802.

7. Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Isolate from any source of heat or ignition. Isolate from acids and alkalis. Wear special protective equipment (Sec. 8) for maintenance break-in or where exposures may exceed established exposure levels. Wash hands, face, forearms and neck when exiting restricted areas. Shower, dispose of outer clothing, change to clean garments at the end of the day. Avoid cross-contamination of street clothes. Wash hands before eating and do not eat, drink, or smoke in workplace. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

8. Exposure Controls/Personal Protection

Airborne Exposure Limits:

None established.

Ventilation System:

A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

Personal Respirators (NIOSH Approved):

For conditions of use where exposure to dust or mist is apparent and engineering controls are not feasible, a particulate respirator (NIOSH type N95 or better filters) may be worn. If oil particles (e.g. lubricants, cutting fluids, glycerine, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

Skin Protection:

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Eye Protection:

Use chemical safety goggles and/or full face shield where dusting or splashing of solutions is possible. Maintain eye wash fountain and quick-drench facilities in work area.

9. Physical and Chemical Properties

Appearance:

Transparent, colorless crystals.

Odor:

Slight odor of mercaptans.

Solubility:

16.3g/100ml water @ 25C (77F).

Density:

No information found.

pH:

No information found.

% Volatiles by volume @ 21C (70F):

0

Boiling Point:

No information found.

Melting Point:

112 - 114C (234 - 237F)

Vapor Density (Air=1):

No information found.

Vapor Pressure (mm Hg):

No information found.

Evaporation Rate (BuAc=1):

No information found.

10. Stability and Reactivity

Stability:

Stable under ordinary conditions of use and storage.

Hazardous Decomposition Products:

Burning may produce sulfur oxides and nitrogen oxides. Can decompose to hydrogen sulfide and acetonitrile.

Hazardous Polymerization:

Will not occur.

Incompatibilities:

Mineral acids. Releases hydrogen sulfide when heated with acids. Releases sodium sulfide when heated with bases.

Conditions to Avoid:

Heat, flames, ignition sources and incompatibles.

11. Toxicological Information

Oral rat LD50: 301 mg/kg.

Investigated as a tumorigen, mutagen, reproductive effector.

-----\Cancer Lists\-----			
Ingredient	---NTP Carcinogen---		IARC Category
	Known	Anticipated	
Thioacetamide (62-55-5)	No	Yes	2B

12. Ecological Information

Environmental Fate:

When released into the soil, this material may leach into groundwater. When released into water, this material may biodegrade to a moderate extent. When released into water, this material is not expected to evaporate significantly. This material is not expected to significantly bioaccumulate. When released into the air, this material may be moderately degraded by photolysis.

Environmental Toxicity:

No information found.

13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to a RCRA approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

14. Transport Information

Not regulated.

15. Regulatory Information

-----\Chemical Inventory Status - Part 1\-----				
Ingredient	TSCA	EC	Japan	Australia
Thioacetamide (62-55-5)	Yes	Yes	Yes	Yes

-----\Chemical Inventory Status - Part 2\-----				
Ingredient	Korea	--Canada--		Phil.
		DSL	NDSL	
Thioacetamide (62-55-5)	No	Yes	No	Yes

-----\Federal, State & International Regulations - Part 1\-----				
Ingredient	-SARA 302-		-----SARA 313-----	
	RQ	TPQ	List	Chemical Catg.
Thioacetamide (62-55-5)	No	No	Yes	No

-----\Federal, State & International Regulations - Part 2\-----			
Ingredient	CERCLA	-RCRA-	-TSCA-
		261.33	8 (d)
Thioacetamide (62-55-5)	10	U218	No

Chemical Weapons Convention: No TSCA 12(b): No CDTA: No
 SARA 311/312: Acute: Yes Chronic: Yes Fire: No Pressure: No
 Reactivity: No (Pure / Solid)

WARNING:

THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.

Australian Hazchem Code: None allocated.

Poison Schedule: None allocated.

WHMIS:

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

16. Other Information

NFPA Ratings: Health: 2 Flammability: 1 Reactivity: 0

Label Hazard Warning:

WARNING! HARMFUL IF SWALLOWED, INHALED OR ABSORBED THROUGH SKIN. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT. SUSPECT CANCER HAZARD. MAY CAUSE CANCER. Risk of cancer depends on level and duration of exposure. MAY CAUSE LIVER DAMAGE.

Label Precautions:

Do not breathe dust.
 Do not get in eyes, on skin, or on clothing.
 Keep container closed.
 Use only with adequate ventilation.
 Wash thoroughly after handling.

Label First Aid:

If swallowed, induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. In all cases, get medical attention.

Product Use:

Laboratory Reagent.