

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form	: Substance
Substance name	: Thioacetamide
CAS No	: 62-55-5
Product code	: LC26000
Formula	: C ₂ H ₅ NS
Synonyms	: acetothioamide / ethanethioamide / thioacetimidic acid
BIG no	: 22000

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture	: Laboratory chemical Stabilizer Industrial use
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1.3. Details of the supplier of the safety data sheet

LabChem Inc
Jackson's Pointe Commerce Park Building 1000, 1010 Jackson's Pointe Court
Zelienople, PA 16063 - USA
T 412-826-5230 - F 724-473-0647
info@labchem.com - www.labchem.com

1.4. Emergency telephone number

Emergency number	: CHEMTREC: 1-800-424-9300 or 011-703-527-3887
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Acute Tox. 4 (Oral)	H302
Skin Irrit. 2	H315
Eye Irrit. 2A	H319
Carc. 1B	H350
Aquatic Chronic 3	H412

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US)



Signal word (GHS-US)

: Danger

Hazard statements (GHS-US)

: H302 - Harmful if swallowed
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H350 - May cause cancer
H412 - Harmful to aquatic life with long lasting effects

Precautionary statements (GHS-US)

: P201 - Obtain special instructions before use
P202 - Do not handle until all safety precautions have been read and understood
P264 - Wash exposed skin thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P273 - Avoid release to the environment
P280 - Wear protective gloves, protective clothing, eye protection, face protection
P301+P312 - IF SWALLOWED: call a POISON CENTER or doctor/physician if you feel unwell
P302+P352 - IF ON SKIN: Wash with plenty of soap and water
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P308+P313 - IF exposed or concerned: Get medical advice/attention
P330 - If swallowed, rinse mouth

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P332+P313 - If skin irritation occurs: Get medical advice/attention
P337+P313 - If eye irritation persists: Get medical advice/attention
P362 - Take off contaminated clothing and wash before reuse
P405 - Store locked up
P501 - Dispose of contents/container to comply with local, state and federal regulations

2.3. Other hazards

Other hazards not contributing to the classification : None under normal conditions.

2.4. Unknown acute toxicity (GHS-US)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substance

Substance type : Mono-constituent

Name	Product identifier	%	GHS-US classification
Thioacetamide (Main constituent)	(CAS No) 62-55-5	100	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Carc. 1B, H350 Aquatic Chronic 3, H412

Full text of H-phrases: see section 16

3.2. Mixture

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with laboured breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital.

First-aid measures after inhalation : Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.

First-aid measures after skin contact : Wash immediately with lots of water. Soap may be used. Do not apply (chemical) neutralizing agents. Take victim to a doctor if irritation persists.

First-aid measures after eye contact : Rinse immediately with plenty of water. Do not apply neutralizing agents. Take victim to an ophthalmologist if irritation persists.

First-aid measures after ingestion : Rinse mouth with water. Call Poison Information Centre (www.big.be/antigif.htm). Consult a doctor/medical service if you feel unwell. Ingestion of large quantities: immediately to hospital.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after skin contact : Tingling/irritation of the skin.

Symptoms/injuries after eye contact : Irritation of the eye tissue.

Symptoms/injuries after ingestion : Enlargement/affection of the liver.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Alcohol-resistant foam. ABC powder. Carbon dioxide.

Unsuitable extinguishing media : No unsuitable extinguishing media known.

5.2. Special hazards arising from the substance or mixture

Fire hazard : DIRECT FIRE HAZARD. Non-flammable. In finely divided state: increased fire hazard. INDIRECT FIRE HAZARD. Heating increases the fire hazard. Reactions involving a fire hazard: see "Reactivity Hazard".

Explosion hazard : DIRECT EXPLOSION HAZARD. Its dust is explosive with air. INDIRECT EXPLOSION HAZARD. Dust cloud can be ignited by a spark.

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Reactivity	: On heating: release of toxic/corrosive/combustible gases/vapours (hydrogen sulphide, ammonia). On burning: release of toxic and corrosive gases/vapours (nitrous vapours, sulphur oxides, carbon monoxide - carbon dioxide). Reacts with (some) acids: release of toxic/combustible gases/vapours (hydrogen sulphide).
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5.3. Advice for firefighters

Precautionary measures fire	: Exposure to fire/heat: keep upwind. Exposure to fire/heat: consider evacuation. Exposure to fire/heat: have neighbourhood close doors and windows.
Firefighting instructions	: Cool tanks/drums with water spray/remove them into safety. Do not move the load if exposed to heat. Dilute toxic gases with water spray. Take account of toxic fire-fighting water. Use water moderately and if possible collect or contain it.
Protection during firefighting	: Heat/fire exposure: compressed air/oxygen apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment	: Gloves. Face-shield. Protective clothing. Dust cloud production: compressed air/oxygen apparatus. Dust cloud production: dust-tight suit. Reactivity hazard: compressed air/oxygen apparatus. Reactivity hazard: gas-tight suit.
Emergency procedures	: Mark the danger area. Prevent dust cloud formation. No naked flames. In case of hazardous reactions: keep upwind. In case of reactivity hazard: consider evacuation. Wash contaminated clothes.
Measures in case of dust release	: In case of dust production: keep upwind. Dust production: have neighbourhood close doors and windows. Dust production: stop engines and no smoking. In case of dust production: no naked flames or sparks. Dust: spark-/explosionproof appliances/lighting equipment.

6.1.2. For emergency responders

Protective equipment	: Do not breathe dust. Equip cleanup crew with proper protection.
Emergency procedures	: If a major spill occurs, all personnel should be immediately evacuated and the area ventilated. Ventilate area. Stop release.

6.2. Environmental precautions

Prevent soil and water pollution. Prevent spreading in sewers.

6.3. Methods and material for containment and cleaning up

For containment	: Contain released substance, pump into suitable containers. Plug the leak, cut off the supply. Dam up the solid spill. Knock down/dilute dust cloud with water spray. Hazardous reaction: measure explosive gas-air mixture. If reacting: dilute combustible/toxic gases/vapours. Take account of toxic/corrosive precipitation water. Powdered form: no compressed air for pumping over spills. On heating: dilute combustible/toxic gases/vapours.
Methods for cleaning up	: Stop dust cloud by covering with sand/earth. Scoop solid spill into closing containers. Carefully collect the spill/leftovers. Powdered: do not use compressed air for pumping over spills. Take collected spill to manufacturer/competent authority. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	: Comply with the legal requirements. Remove contaminated clothing immediately. Clean contaminated clothing. Thoroughly clean/dry the installation before use. Do not discharge the waste into the drain. Powdered form: no compressed air for pumping over. Avoid raising dust. Keep away from naked flames/heat. Finely divided: spark- and explosionproof appliances. Finely divided: keep away from ignition sources/sparks. Observe strict hygiene. Keep container tightly closed. Measure the concentration in the air regularly. Carry operations in the open/under local exhaust/ventilation or with respiratory protection.
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7.2. Conditions for safe storage, including any incompatibilities

Heat and ignition sources	: KEEP SUBSTANCE AWAY FROM: heat sources.
Prohibitions on mixed storage	: KEEP SUBSTANCE AWAY FROM: (strong) acids. (strong) bases.
Storage area	: Store in a cool area. Store in a dry area. Provide for an automatic sprinkler system. Keep only in the original container. Meet the legal requirements.
Special rules on packaging	: SPECIAL REQUIREMENTS: closing. clean. correctly labelled. meet the legal requirements. Secure fragile packagings in solid containers.

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Packaging materials : SUITABLE MATERIAL: glass.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Appropriate engineering controls : Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation.

Materials for protective clothing : GIVE EXCELLENT RESISTANCE: No data available. GIVE GOOD RESISTANCE: No data available. GIVE LESS RESISTANCE: No data available. GIVE POOR RESISTANCE: No data available.

Hand protection : Gloves.

Eye protection : Face shield. In case of dust production: protective goggles.

Skin and body protection : Protective clothing. In case of dust production: head/neck protection. In case of dust production: dustproof clothing.

Respiratory protection : Dust production: dust mask with filter type P3.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid

Appearance : Crystalline solid. Crystalline powder. Pellets/tablets.

Molecular mass : 75.13 g/mol

Colour : White or yellow.

Odour : Unpleasant odour.

Odour threshold : No data available

pH : No data available

Relative evaporation rate (butylacetate=1) : No data available

Melting point : 113 °C

Freezing point : No data available

Boiling point : No data available

Flash point : No data available

Self ignition temperature : No data available

Decomposition temperature : No data available

Flammability (solid, gas) : No data available

Vapour pressure : No data available

Relative vapour density at 20 °C : No data available

Relative density : No data available

Solubility : Soluble in water. Soluble in ethanol. Soluble in petroleum spirit.
Water: 16.3 g/100ml (25 °C)
Ethanol: 26.4 g/100ml

Log Pow : < 0.36 (Calculated)

Log Kow : No data available

Viscosity, kinematic : No data available

Viscosity, dynamic : No data available

Explosive properties : No data available

Oxidising properties : No data available

Explosive limits : No data available

9.2. Other information

Other properties : Translucent.

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SECTION 10: Stability and reactivity

10.1. Reactivity

On heating: release of toxic/corrosive/combustible gases/vapours (hydrogen sulphide, ammonia). On burning: release of toxic and corrosive gases/vapours (nitrous vapours, sulphur oxides, carbon monoxide - carbon dioxide). Reacts with (some) acids: release of toxic/combustible gases/vapours (hydrogen sulphide).

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Harmful if swallowed.

Thioacetamide (f)62-55-5	
LD50 oral rat	301 mg/kg (Rat)
Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: May cause cancer.

Thioacetamide (62-55-5)	
IARC group	2B - Possibly carcinogenic to humans
National Toxicology Program (NTP) Status	3 - Reasonably anticipated to be Human Carcinogen

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

Symptoms/injuries after skin contact : Tingling/irritation of the skin.

Symptoms/injuries after eye contact : Irritation of the eye tissue.

Symptoms/injuries after ingestion : Enlargement/affection of the liver.

Likely routes of exposure : Skin and eyes contact;Inhalation

SECTION 12: Ecological information

12.1. Toxicity

Ecology - air : TA-Luft Klasse 5.2.7.1.1/II.

Ecology - water : Severe water pollutant (surface water). Harmful to invertebrates (Daphnia).

12.2. Persistence and degradability

Thioacetamide (62-55-5)	
Persistence and degradability	Not readily biodegradable in water. Photodegradation in the air.
BOD (% of ThOD)	0 % ThOD

12.3. Bioaccumulative potential

Thioacetamide (62-55-5)	
BCF other aquatic organisms 1	3 (Estimated value)

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Thioacetamide (62-55-5)	
Log Pow	< 0.36 (Calculated)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Remove to an authorized incinerator equipped with an afterburner and a flue gas scrubber with energy recovery.

Additional information : Hazardous waste according to Directive 2008/98/EC.

SECTION 14: Transport information

In accordance with DOT

No dangerous good in sense of transport regulations

Additional information

Other information : No supplementary information available.

State during transport (ADR-RID) : Rail and road transport: not subject to ADR-RID.

ADR

Transport document description :

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

Thioacetamide (62-55-5)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Listed on SARA Section 313 (Specific toxic chemical listings)	
RQ (Reportable quantity, section 304 of EPA's List of Lists) :	10 lb

15.2. International regulations

CANADA

Thioacetamide (62-55-5)	
Listed on the Canadian DSL (Domestic Substances List) inventory.	
WHMIS Classification	Class D Division 2 Subdivision A - Very toxic material causing other toxic effects Class D Division 2 Subdivision B - Toxic material causing other toxic effects

EU-Regulations

No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Carc. 1B H350
Acute Tox. 4 (Oral) H302

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Eye Irrit. 2 H319
Skin Irrit. 2 H315
Aquatic Chronic 3 H412

Full text of H-phrases: see section 16

Classification according to Directive 67/548/EEC or 1999/45/EC

Carc.Cat.2; R45

Xn; R22

Xi; R36/38

R52/53

Full text of R-phrases: see section 16

15.2.2. National regulations

Thioacetamide (62-55-5)

Listed on IARC (International Agency for Research on Cancer)

Listed as carcinogen on NTP (National Toxicology Program)

Listed on the Canadian Ingredient Disclosure List

15.3. US State regulations

Thioacetamide(62-55-5)

U.S. - California - Proposition 65 - Carcinogens List

Yes

SECTION 16: Other information

Full text of H-phrases: see section 16:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Carc. 1B	Carcinogenicity, Category 1B
Eye Irrit. 2A	Serious eye damage/eye irritation, Category 2A
Skin Irrit. 2	Skin corrosion/irritation, Category 2
H302	Harmful if swallowed
H315	Causes skin irritation
H319	Causes serious eye irritation
H350	May cause cancer
H412	Harmful to aquatic life with long lasting effects

NFPA health hazard

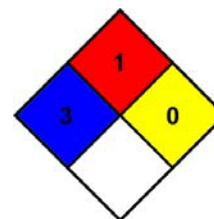
: 3 - Short exposure could cause serious temporary or residual injury even though prompt medical attention was given.

NFPA fire hazard

: 1 - Must be preheated before ignition can occur.

NFPA reactivity

: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



HMIS III Rating

Health : * Chronic Hazard - Chronic (long-term) health effects may result from repeated overexposure
Flammability : 1 Slight Hazard
Physical : 0 Minimal Hazard
Personal Protection : F

SDS US (GHS HazCom 2012)

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