Printing date 01/08/2018

Reviewed on 01/08/2018

1 Identification

- · Product identifier
- · Trade name: <u>Thioacetamide</u>, <u>Reagent ACS</u>
- · Article number: T4600
- · CAS Number:
- 62-55-5
- *EC number:* 200-541-4
- Index number: 616-026-00-6
- Details of the supplier of the safety data sheet
 Manufacturer/Supplier: Aqua Solutions, Inc.
 6913 Highway 225 DEER PARK, TX 77536 USA
 800-256-2586
- Information department: Technical Coordinator Sherman Nelson sherman@aquasolutions.org
- Emergency telephone number: Chemtrec: 800-424-9300 Canutec: 613-996-6666

2 Hazard(s) identification

· Classification of the substance or mixture



GHS08 Health hazard

Carc. 1B H350 May cause cancer.

GHS07

Acute Tox. 4H302Harmful if swallowed.Skin Irrit. 2H315Causes skin irritation.Eye Irrit. 2AH319Causes serious eye irritation.

· Label elements

• *GHS label elements* The substance is classified and labeled according to the Globally Harmonized System (GHS). • *Hazard pictograms*



Signal word Danger
Hazard statements
Harmful if swallowed.
Causes skin irritation.
Causes serious eye irritation.

(Contd. on page 2)

US

Printing date 01/08/2018

Reviewed on 01/08/2018

Trade name: Thioacetamide, Reagent ACS

	(Contd. of page 1)
May cause cancer.	(Conta: of page 1)
· Precautionary statements	
Obtain special instructions before use.	
Do not handle until all safety precautions have been read and understood.	
Wash thoroughly after handling.	
Do not eat, drink or smoke when using this product.	
Wear protective gloves/protective clothing/eye protection/face protection.	
If swallowed: Call a poison center/doctor if you feel unwell.	
If on skin: Wash with plenty of water.	
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present	t and easy to do.
Continue rinsing.	2
IF exposed or concerned: Get medical advice/attention.	
Specific treatment (see on this label).	
Rinse mouth.	
If skin irritation occurs: Get medical advice/attention.	
If eye irritation persists: Get medical advice/attention.	
Take off contaminated clothing and wash it before reuse.	
Store locked up.	
Dispose of contents/container in accordance with local/regional/national/international regulation	15.
· Classification system:	
· NFPA ratings (scale 0 - 4)	
Fire = 0 Reactivity = 0 \cdot HMIS-ratings (scale 0 - 4) HEALTH *2 FIRE 0 REACTIVITY 0 Reactivity = 0 \cdot Other hazards \cdot Results of PBT and vPvB assessment PBT: Not ampliable	
• PBT: Not applicable.	
· vPvB: Not applicable.	
3 Composition/information on ingredients	
 Chemical characterization: Substances CAS No. Description 62-55-5 Thioacetamide Identification number(s) EC number: 200-541-4 	
· Index number: 616-026-00-6	

4 First-aid measures

- · Description of first aid measures
- General information:

Immediately remove any clothing soiled by the product. Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

(Contd. on page 3)

Printing date 01/08/2018

Reviewed on 01/08/2018

Trade name: Thioacetamide, Reagent ACS

(Contd. of page 2)

- After inhalation: In case of unconsciousness place patient stably in side position for transportation.
- After skin contact: Immediately wash with water and soap and rinse thoroughly.
- After eye contact:
- Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- · After swallowing: Immediately call a doctor.
- Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- \cdot Indication of any immediate medical attention and special treatment needed
- No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: No special measures required.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Not required.
- · Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- *Methods and material for containment and cleaning up:* Dispose contaminated material as waste according to item 13. Ensure adequate ventilation.
- **Reference to other sections** See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.
- Protective Action Criteria for Chemicals
- · PAC-1: 0.92 mg/m³
- · PAC-2: 10 mg/m³
- · PAC-3: 60 mg/m³

7 Handling and storage

- · Handling:
- *Precautions for safe handling* Ensure good ventilation/exhaustion at the workplace. Open and handle receptacle with care.
- · Information about protection against explosions and fires: Keep respiratory protective device available.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep receptacle tightly sealed.
- · Specific end use(s) No further relevant information available.

(Contd. on page 4)

Printing date 01/08/2018

Reviewed on 01/08/2018

Trade name: Thioacetamide, Reagent ACS

(Contd. of page 3)

8 Exposure controls/personal protection

• Additional information about design of technical systems: No further data; see item 7.

- · Control parameters
- · Components with limit values that require monitoring at the workplace: Not required.
- Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures: Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Store protective clothing separately. Avoid contact with the eyes and skin.
- · Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

• Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation • Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

- Penetration time of glove material
- The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- Eye protection:



Tightly sealed goggles

· Body protection: Protective work clothing

Information on basic physic General Information	cal and chemical properties	
Appearance:		
Form:	Leaflets	
Color:	Colorless	
Odor:	Odorless	
Odor threshold:	Not determined.	
pH-value:	Not determined.	

Printing date 01/08/2018

Reviewed on 01/08/2018

Trade name: Thioacetamide, Reagent ACS

		(Contd. of page 4
Change in condition		
Melting point/Melting range:	Undetermined.	
Boiling point/Boiling range:	Undetermined.	
· Flash point:	Not applicable.	
· Flammability (solid, gaseous):	Not applicable.	
· Ignition temperature:		
Decomposition temperature:	Not determined.	
• Auto igniting:	Not determined.	
· Danger of explosion:	Product does not present an explosion hazard.	
· Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
· Vapor pressure:	Not determined.	
· Density at 20 °C (68 °F):	0.6 g/cm ³ (5.007 lbs/gal)	
· Relative density	Not determined.	
· Vapor density	Not determined.	
• Evaporation rate	Not applicable.	
· Solubility in / Miscibility with		
Water:	Not determined.	
· Partition coefficient (n-octanol/wat	t er): Not determined.	
· Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
• Other information	No further relevant information available.	

10 Stability and reactivity

• *Reactivity* No further relevant information available.

- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

· Information on toxicological effects

· Acute toxicity:

· LD/LC50 values that are relevant for classification:

Oral LD50 500 mg/kg (ATE)

· Primary irritant effect:

• on the skin: Irritant to skin and mucous membranes.

• on the eye: Irritating effect.

(Contd. on page 6)

US -

Printing date 01/08/2018

Reviewed on 01/08/2018

Trade name: Thioacetamide, Reagent ACS

(Contd. of page 5)

- Sensitization: No sensitizing effects known.
- \cdot Additional toxicological information:
- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer) 2B
- · NTP (National Toxicology Program) R
- · OSHA-Ca (Occupational Safety & Health Administration) Substance is not listed.

12 Ecological information

- · Toxicity
- Aquatic toxicity: No further relevant information available.
- Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 2 (Self-assessment): hazardous for water

- Do not allow product to reach ground water, water course or sewage system.
- Danger to drinking water if even small quantities leak into the ground.
- · Results of PBT and vPvB assessment
- *PBT:* Not applicable.
- **vPvB:** Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

· Waste treatment methods

· Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

UN-Number		
DOT, ADN, IMDG, IATA	Not regulated	
UN proper shipping name		
DOT, ADN, IMDG, IATA	Not regulated	
Transport hazard class(es)		
DOT, ADN, IMDG, IATA		
Class	Not regulated	
Packing group		
DOT, IMDG, IATA	Not regulated	
Environmental hazards:		
Marine pollutant:	No	

Printing date 01/08/2018

Reviewed on 01/08/2018

Trade name: Thioacetamide, Reagent ACS

		(Contd. of page 6
Special precautions for user	Not applicable.	
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.	
Transport/Additional information:		
DOT		
Hazardous substance:	10 lbs, 4.54 kg	
· UN "Model Regulation":	Not regulated	

15 Regulatory information

· Safety, health and environmental regulations/legislation specific for the substance or mixture · Sara

- · Section 355 (extremely hazardous substances): Substance is not listed.
- · Section 313 (Specific toxic chemical listings): Substance is listed.
- · TSCA (Toxic Substances Control Act):

Thioacetamide

· TSCA new (21st Century Act) (Substances not listed)

· Proposition 65

- · Chemicals known to cause cancer: Substance is listed.
- · Chemicals known to cause reproductive toxicity for females: Substance is not listed.
- · Chemicals known to cause reproductive toxicity for males: Substance is not listed.
- · Chemicals known to cause developmental toxicity: Substance is not listed.
- · Carcinogenic categories
- · EPA (Environmental Protection Agency) Substance is not listed.
- TLV (Threshold Limit Value established by ACGIH) Substance is not listed.
- · NIOSH-Ca (National Institute for Occupational Safety and Health) Substance is not listed.
- GHS label elements The substance is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms



· Signal word Danger

Hazard statements
Harmful if swallowed.
Causes skin irritation.
Causes serious eye irritation.
May cause cancer.
Precautionary statements
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Wear protective gloves/protective clothing/eye protection/face protection.
If swallowed: Call a poison center/doctor if you feel unwell.
If on skin: Wash with plenty of water.

(Contd. on page 8)

⁻ US

Printing date 01/08/2018

Reviewed on 01/08/2018

Trade name: Thioacetamide, Reagent ACS

If in eves: Rinse cal	Contd. of page 7) (Contd. of page 7) (Contd. of page 7) (Contd. of page 7) (Contd. of page 7)
Continue rinsing.	tiousty with water for several minutes. Remove condet tenses, if present and easy to do
0	ned: Get medical advice/attention.
Specific treatment (se	
Rinse mouth.	
If skin irritation occu	rs: Get medical advice/attention.
	sts: Get medical advice/attention.
	d clothing and wash it before reuse.
Store locked up.	
Dispose of contents/c	ontainer in accordance with local/regional/national/international regulations.
Carcinogenic hazard Carcinogenic hazard	: tion according to Decree on Hazardous Materials: ous material group I (extremely dangerous). ous material group II (very dangerous). ous material group III (dangerous).
Information about li	mitation of use:
Workers are not allo certain cases.	wed to be exposed to this hazardous material. Exceptions can be made by the authorities in
Chemical safety asse	ssment: A Chemical Safety Assessment has not been carried out.

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Environment protection department.
- · Contact:
- · Date of preparation / last revision 01-08-2018: review SDS for accuracy. STN Creation date for SDS 02-20-2014. STN 01/08/2018 / -· Abbreviations and acronyms: ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association ACGIH: American Conference of Governmental Industrial Hygienists EINECS: European Inventory of Existing Commercial Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health TLV: Threshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit Acute Tox. 4: Acute toxicity – Category 4 Skin Irrit. 2: Skin corrosion/irritation - Category 2
- Eye Irrit. 2A: Serious eye damage/eye irritation Category 2A
- Carc. 1B: Carcinogenicity Category 1B

US -