

# Safety Data Sheet

acc. to OSHA HCS

Printing date 09/29/2017

Reviewed on 09/29/2017

## 1 Identification

- **Product identifier**
- **Trade name:** N-Allylthiourea, 98%
- **Article number:** A2862
- **CAS Number:**  
109-57-9
- **EC number:**  
203-683-5
- **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:**  
Chemtec: 800-424-9300  
Canutec: 613-996-6666



## 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS06 Skull and crossbones

Acute Tox. 3 H301 Toxic if swallowed.

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



GHS06

- **Signal word** *Danger*
- **Hazard statements**  
*Toxic if swallowed.*
- **Precautionary statements**  
*Wash thoroughly after handling.*  
*Do not eat, drink or smoke when using this product.*  
*IF SWALLOWED: Immediately call a POISON CENTER/ doctor.*  
*Rinse mouth.*  
*Store locked up.*  
*Dispose of contents/container in accordance with local/regional/national/international regulations.*

(Contd. on page 2)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 09/29/2017

Reviewed on 09/29/2017

Trade name: N-Allylthiourea, 98%

(Contd. of page 1)

- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



- **HMIS-ratings (scale 0 - 4)**



- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### 3 Composition/information on ingredients

- **Chemical characterization: Substances**
- **CAS No. Description**  
109-57-9 N-Allylthiourea, 98%
- **Identification number(s)**
- **EC number:** 203-683-5

### 4 First-aid measures

- **Description of first aid measures**
- **General information:**  
Immediately remove any clothing soiled by the product.  
In case of irregular breathing or respiratory arrest provide artificial respiration.
- **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. Then consult a doctor.
- **After swallowing:** Do not induce vomiting; immediately call for medical help.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **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.

US

(Contd. on page 3)

# Safety Data Sheet

## acc. to OSHA HCS

Printing date 09/29/2017

Reviewed on 09/29/2017

Trade name: N-Allylthiourea, 98%

(Contd. of page 2)

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:** No special measures required.
- **Methods and material for containment and cleaning up:**  
Dispose contaminated material as waste according to item 13.
- **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:** Substance is not listed.
- **PAC-2:** Substance is not listed.
- **PAC-3:** Substance is not listed.

### 7 Handling and storage

- **Handling:**
- **Precautions for safe handling** Thorough dusting.
- **Information about protection against explosions and fires:** No special measures required.
- **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.

### 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.
- **Breathing equipment:** Not required.
- **Protection of hands:**  
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.

(Contd. on page 4)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 09/29/2017

Reviewed on 09/29/2017

Trade name: N-Allylthiourea, 98%

(Contd. of page 3)

- **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:** Not required.
- **Body protection:** Protective work clothing

## 9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**
  - Form: Crystalline
  - Color: Beige
- **Odor:** Characteristic
- **Odor threshold:** Not determined.
- **pH-value:** Not applicable.
- **Change in condition**
  - Melting point/Melting range: 70-72 °C (158-162 °F)
  - Boiling point/Boiling range: Undetermined.
- **Flash point:** Not applicable.
- **Flammability (solid, gaseous):** Product is not flammable.
- **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 applicable.
- **Density at 20 °C (68 °F):** 1.11 g/cm<sup>3</sup> (9.263 lbs/gal)
- **Relative density** Not determined.
- **Vapor density** Not applicable.
- **Evaporation rate** Not applicable.
- **Solubility in / Miscibility with Water:** Not determined.
- **Partition coefficient (n-octanol/water):** Not determined.
- **Viscosity:**
  - Dynamic: Not applicable.
  - Kinematic: Not applicable.
- **Other information** No further relevant information available.

## 10 Stability and reactivity

- **Reactivity** No further relevant information available.

(Contd. on page 5)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 09/29/2017

Reviewed on 09/29/2017

Trade name: N-Allylthiourea, 98%

(Contd. of page 4)

- **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	200 mg/kg (rat)
Inhalative	LC50/4 h	not available mg/l (rat)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
- **Carcinogenic categories**
- **IARC (International Agency for Research on Cancer)** Substance is not listed.
- **NTP (National Toxicology Program)** Substance is not listed.
- **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:** Not known to be hazardous to water.
- **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.

US

(Contd. on page 6)

# Safety Data Sheet

acc. to OSHA HCS



Printing date 09/29/2017

Reviewed on 09/29/2017

Trade name: N-Allylthiourea, 98%

(Contd. of page 5)

## 14 Transport information

<b>· UN-Number</b>	UN2811
<b>· DOT, IMDG, IATA</b>	UN2811
<b>· UN proper shipping name</b>	Toxic solids, organic, n.o.s. (N-Allylthiourea, 98%)
<b>· DOT</b>	TOXIC SOLID, ORGANIC, N.O.S. (N-Allylthiourea, 98%)
<b>· IMDG, IATA</b>	TOXIC SOLID, ORGANIC, N.O.S. (N-Allylthiourea, 98%)
<b>· Transport hazard class(es)</b>	
<b>· DOT</b>	
	
<b>· Class</b>	6.1 Toxic substances
<b>· Label</b>	6.1
<b>· IMDG, IATA</b>	
	
<b>· Class</b>	6.1 Toxic substances
<b>· Label</b>	6.1
<b>· Packing group</b>	III
<b>· DOT, IMDG, IATA</b>	III
<b>· Environmental hazards:</b>	
<b>· Marine pollutant:</b>	No
<b>· Special precautions for user</b>	Warning: Toxic substances
<b>· Danger code (Kemler):</b>	6.1
<b>· EMS Number:</b>	F-A,S-A
<b>· Stowage Category</b>	A
<b>· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
<b>· UN "Model Regulation":</b>	UN 2811 TOXIC SOLIDS, ORGANIC, N.O.S. (N-ALLYLTHIOUREA, 98%), 6.1, III

## 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 not listed.
- TSCA (Toxic Substances Control Act): Substance is listed.
- Proposition 65
- Chemicals known to cause cancer: Substance is not 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.

(Contd. on page 7)

# Safety Data Sheet

## acc. to OSHA HCS

Printing date 09/29/2017

Reviewed on 09/29/2017

Trade name: N-Allylthiourea, 98%

(Contd. of page 6)

- **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**



GHS06

- **Signal word** *Danger*
- **Hazard statements**  
*Toxic if swallowed.*
- **Precautionary statements**  
*Wash thoroughly after handling.*  
*Do not eat, drink or smoke when using this product.*  
*IF SWALLOWED: Immediately call a POISON CENTER/ doctor.*  
*Rinse mouth.*  
*Store locked up.*  
*Dispose of contents/container in accordance with local/regional/national/international regulations.*
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### 16 Other information

*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**  
*Creation date for SDS 10-10-2014. STN*  
*09-29-2017: review SDS for accuracy. STN*  
*09/29/2017 / -*
- **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. 3: Acute toxicity – Category 3*