

# MSDS

# Material Safety Data Sheet

Date prepared: May 28, 2012

Date revised: N/A (first edition)

## Section 1 - General Information

**Chemical Name:** Semicarbazide hydrochloride  
**CAS Reg. Number:** 563-41-7  
**Catalog Number:** 1ST1407  
**Manufacturer's Name:** A Chemtek, Inc.  
100 Barber Avenue  
Worcester, MA 01606, USA  
**Telephone Number:** 508-471-4121  
**Fax Number:** 508-845-9201  
*For R & D use only*

## Section 2 - Hazardous Ingredients/Identity Information

### Emergency Overview


#### OSHA Hazards

Toxic by ingestion, Reproductive hazard

#### GHS Classification

Acute toxicity, Oral (Category 3)

#### GHS Label elements, including precautionary statements

Pictogram   
Signal word Danger  
Hazard statement(s)  
H301 Toxic if swallowed.  
Precautionary statement(s)  
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.

#### HMIS Classification

Health hazard: 2  
Chronic Health Hazard: \*  
Flammability: 0  
Physical hazards: 0

#### NFPA Rating

Health hazard: 2  
Fire: 0  
Reactivity Hazard: 0

#### Potential Health Effects

**Inhalation** May be harmful if inhaled. Causes respiratory tract irritation.  
**Skin** May be harmful if absorbed through skin. May cause skin irritation.  
**Eyes** May cause eye irritation.  
**Ingestion** Toxic if swallowed.

## Section 3 - Composition/Information on Ingredients

**Formula:**  $\text{CH}_5\text{N}_3\text{O}\cdot\text{HCl}$   
**Molecular Weight:** 111.53g/mol  
**CAS-No.** 563-41-7

## Section 4 - First Aid Measures

### If inhaled

If breathed in, move person into fresh air. If not breathing give artificial respiration.

### In case of skin contact

Wash off with soap and plenty of water.

### In case of eye contact

Flush eyes with water as a precaution.

### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

## Section 5 - Fire-Fighting Measures

### Suitable extinguishing media

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Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

## Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

## Hazardous combustion products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NO<sub>x</sub>), Hydrogen chloride gas

## Section 6 - Accidental Release Measures

**Personal precautions** Avoid dust formation.

**Environmental precautions** Do not let product enter drains.

**Methods for cleaning up** Sweep up and shovel. Keep in suitable, closed containers for disposal.

## Section 7 - Handling and Storage

**Handling** Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

**Storage** Keep container tightly closed in a dry and well-ventilated place. Store in cool place.

## Section 8 - Exposure Controls/Personal Protection

Contains no substances with occupational exposure limit values.

### Personal protective equipment

#### Eye/face protection

Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### Skin protection

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### Body Protection

The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N99 (US) or type P2 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

## Section 9 - Physical and Chemical Properties

### Appearance:

Form	Powder
Colour	White

### Safety data

pH:	not available
Melting point:	Melting point/range: 175 - 177 °C (347 - 351 °F) - dec.
Boiling point:	not available
Flash point:	not available
Ignition temperature:	not available
Lower explosion limit:	not available
Upper explosion limit:	not available
Water solubility:	not available

**Other safety information** not available

## Section 10 - Stability and Reactivity

**Storage stability** Stable under recommended storage conditions

**Materials to avoid** Strong oxidizing agents

**Conditions to avoid** not available

### Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NO<sub>x</sub>), Hydrogen chloride gas

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Other decomposition products - no data available

## Section 11 - Toxicological Information

### Acute toxicity

#### Oral LD50

LD50 Oral - rat - 123 mg/kg

**Irritation and corrosion:** not available

**Sensitization:** not available

**Respiratory or skin sensitization:** not available

### Chronic exposure

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC, ACGIH, NTP, or OSHA.

### Potential health effects

Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.

Skin: May be harmful if absorbed through skin. May cause skin irritation.

Eyes: May cause eye irritation.

Ingestion: Toxic if swallowed.

## Section 12 - Ecological Information

**Toxicity** not available

**Elimination information (persistence and degradability)**

not available

**Ecotoxicity effects:** not available

**Further information on ecology:** not available

## Section 13 - Disposal Considerations

**Product** Offer surplus and non-recyclable solutions to a licensed disposal company.

**Contaminated packaging** Dispose of as unused product.

## Section 14- Transport Information

### DOT (US)

UN number: 2811 Class: 6.1 Packing group: III

Proper shipping name: Toxic solids, organic, n.o.s. (Semicarbazide hydrochloride)

Reportable Quantity (RQ):

Marine pollutant: No

Poison Inhalation Hazard: No

### IMDG

UN number: 2811 Class: 6.1 Packing group: III EMS-No: F-A, S-A

Proper shipping name: TOXIC SOLID, ORGANIC, N.O.S. (Semicarbazide hydrochloride)

Marine pollutant: No

### IATA

UN number: 2811 Class: 6.1 Packing group: III

Proper shipping name: Toxic solid, organic, n.o.s. (Semicarbazide hydrochloride)

## Section 15 - Regulatory Information

### OSHA Hazards

Toxic by ingestion, Reproductive hazard

### SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Semicarbazide hydrochloride

CAS-No.563-41-7

### SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

### SARA 311/312 Hazards

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Acute Health Hazard, Chronic Health Hazard

**Massachusetts Right To Know Components**

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**Pennsylvania Right To Know Components**

Semicarbazide hydrochloride

CAS-No.563-41-7

**New Jersey Right To Know Components**

Semicarbazide hydrochloride

CAS-No.563-41-7

**California Prop. 65 Components**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

**Section 16 - Other Information**

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. A Chemtek shall not be held liable for any damage resulting from handling or from contact with the above product.