



## SAFETY DATA SHEET

*This Safety Data Sheet complies with the Canadian Controlled Product Regulations, the United States Occupational Safety and Health Administration (OSHA) Hazard Communication Standard, 29 CFR 1910 (OSHA HCS), and the European Union Directives.*

### 1. Product and Supplier Identification

- 1.1 **Product:** Coghlan's Solid Fuel Tablets, #9560 and #9565
- 1.2 **Other Means of Identification:** None
- 1.3 **Product Use:** Solid Fuel
- 1.4 **Restrictions on Use:** None known
- 1.5 **Producer:** Coghlan's Ltd.,  
121 Irene Street,  
Winnipeg, Manitoba  
Canada, R3T 4C7
- Telephone: +1(204) 284-9550  
Facsimile: +1(204) 475-4127
- Supplier:** As above
- 1.6 **Emergencies:** +1(877) 264-4526

### 2. Hazards Identification

- 2.1 **Classification of product or mixture**  
Note to reader: This product in an untested mixture and GHS classification is based on the classification of the ingredients and their concentrations. Proprietary ingredients, if any, do NOT exhibit any health effects not listed in this SDS.

**GHS Classification:** Flammable Solid, Category 2  
Skin Sensitization, Category 1

- 2.2 **GHS Label Elements, including precautionary statements**

**Pictogram:**



**Signal Word:** Warning

**GHS Hazard Statements:** H228: Flammable solids  
H317: May cause an allergic skin reaction

**GHS Precautionary Statements:**

**Prevention:** P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P240: Ground and bond container and receiving equipment.  
P241: Use explosion-proof electrical/ventilating/lighting equipment.  
P261: Avoid breathing dust/fume/gas/mist/vapours.  
P272: Contaminated work clothing should not be allowed out of the workplace.  
P280: Wear protective gloves/protective clothing/eye protection/face protection.

**Response:** P302+P352: IF ON SKIN: Wash with plenty of soap and water for at least 15 minutes.  
P333+P313: If skin irritation or rash occurs: Get medical advice/attention.  
P321: Specific treatment (see Section 4 of this SDS).  
P362+P364: Take off contaminated clothing and wash it before reuse.  
P370+P378: In case of fire: Use water spray, alcohol resistant foam, dry chemical or carbon dioxide to extinguish.

**Storage:** Store away from incompatibles. Keep away from moisture and water.

**Disposal:** P501: Dispose of contents/container in accordance with local regulations, following product label directions.

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS:** None

**2.4 Additional Information**

**Primary Routes of Entry:**

Skin Contact:	Yes
Skin Absorption:	Yes
Eye Contact:	Yes
Ingestion:	Yes
Inhalation:	Yes

**Emergency Overview:** This product is ignited to provide a heat source for cooking or warmth. When ignited, contact with skin can cause severe burns. Vapours and fumes created by burning the fuel tablets may be harmful if inhaled. May cause respiratory irritation if the smoke/vapours are inhaled. Do not inhale vapours or smoke from burning tablets. Prolonged exposure to these vapours through inhalation may cause eye and/or respiratory irritation, headache and/or nausea. Only use outdoors.

**Effects of Short-Term (Acute) Exposure:**

**Inhalation:** Ensure that a burning tablet is not upwind of persons close. Prolonged inhalation of the smoke may cause eye and respiratory irritation and headache and/or nausea.

**Skin Contact:** Contact with the tablets may cause skin irritation or sensitization. Skin rash may occur in persons predisposed to skin problems and in some cases upon initial contact. Prolonged use may produce sensitization in some people. Although it is recommended to wash hands and skin thoroughly after handling, ingestion of residues by touching mouth is not expected to have serious health effects. Wash hands and exposed skin after handling the tablets.

**Eye Contact:** Smoke or vapours from the burning tablets may cause transient eye discomfort.

**Ingestion:** Accidental ingestion may cause stomach upset and in case of gross consumption headache, nausea and dizziness. Immediately contact a POISON CONTROL CENTER, doctor or nearest hospital for treatment advice.

**Effects of Long-Term (Chronic) Exposure:** Continued or prolonged use of this product may produce sensitization effects. Symptoms may be sudden with a rash occurring after use when no previous rash occurred through use. If this happens discontinue use or use skin protection to prevent reoccurrence.

**Medical Conditions Aggravated By Exposure:** Previous sensitization or a history of skin problems.

### 3. Composition

#### 3.1 Mixture composition

Component	% (w/w)	GHS Classification
Hexamethylenetetramine CAS No 100-97-0 EINECS No 202-905-8	<99	Flammable Solid, Category 2 Skin Sensitizer, Category 1
Non-hazardous ingredients or those below disclosure requirements	<1	N/ap

**ABBREVIATION KEY:** N/p: not published, N/d: not determined, N/ap: not applicable, N/av: not available

### 4. First Aid Measures

#### 4.1 Description of First Aid Measures

**General advice:** If ingested or a sudden rash occurs and persists, consult a physician. Show this Safety Data Sheet to the doctor in attendance. Wash hands after handling and skin areas where contact has occurred. It is recommended that hands be washed before eating, drinking or smoking.

**In case of eye contact:** Immediately flush eyes with plenty of water for 15 minutes, occasionally lifting upper eyelids. Get medical attention immediately. Remove contact lenses if easy to do.

**In case of skin contact:** Wash hands immediately with soap and water after handling. Do not eat, drink or smoke until hands are thoroughly washed. If irritation occurs or persists seek medical advice.

**If inhalation:** Remove from exposure and into fresh air immediately. Do not sit downwind of smoke. Use only outdoors. If excessive smoke is inhaled, remove victim to fresh air. If breathing is

labored, give artificial respiration. Seek medical attention if breathing is difficult or discomfort occurs.

**If ingestion:** This product has low oral toxicity, however, if ingested do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth and give 2 – 4 cups of water of milk. If ingested immediately call a POISON CONTROL CENTER, doctor or nearest hospital for treatment advice. If spontaneous vomiting occurs, have victim lean forward with head between knees to avoid aspirating vomitus. Rinse mouth.

#### **4.2 Most important symptoms and effects, both acute and delayed**

##### **Effects of Short-Term (Acute) Exposure:**

**Inhalation:** Ensure that a burning tablet is not upwind of persons close. Prolonged inhalation of the smoke may cause eye and respiratory irritation and headache and/or nausea.

**Skin Contact:** Contact with the tablets may cause skin irritation or sensitization. Skin rash may occur in persons predisposed to skin problems and in some cases upon initial contact. Prolonged use may produce sensitization in some people. Although it is recommended to wash hands and skin thoroughly after handling, ingestion of residues by touching mouth is not expected to have serious health effects. Wash hands and exposed skin after handling the tablets.

**Eye Contact:** Smoke or vapours from the burning tablets may cause transient eye discomfort.

**Ingestion:** Accidental ingestion may cause stomach upset and in case of gross consumption headache, nausea and dizziness. Immediately contact a POISON CONTROL CENTER, doctor or nearest hospital for treatment advice.

**Effects of Long-Term (Chronic) Exposure:** Continued or prolonged use of this product may produce sensitization effects. Symptoms may be sudden with a rash occurring after use when no previous rash occurred through use. If this happens discontinue use or use skin protection to prevent reoccurrence.

**Medical Conditions Aggravated By Exposure:** Previous sensitization or a history of skin problems.

#### **4.3 Indication of any immediate medical attention and special treatment needed**

No data available.

## **5. Fire Fighting Measures**

### **5.1 Extinguishing Media**

**Suitable extinguishing media:** Product is a flammable solid. Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide to extinguish fire. If available, cover tablet with sand and then soak sand with water. Tablets may re-ignite after using water for extinguishment.

### **5.2 Special hazards arising from mixture:** Combustion or thermal decomposition may produce toxic fumes of hydrogen cyanide, nitrogen oxides and carbon oxides.

**Advice for firefighters:** In any fire situation, firefighters should wear full protective clothing including self contained breathing apparatus. Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

### 5.3 Further Information:

**Sensitivity to Impact:** No  
**Sensitivity to Static Discharge:** No

#### HAZARDOUS MATERIALS INFORMATION SYSTEM (HMIS) HAZARD INDEX:

HEALTH: 1

FLAMMABILITY: 2

REACTIVITY: 2

CHRONIC HEALTH: \*

PERSONAL PROTECTION: None

## 6. Accidental Release Measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid forming dust. Avoid breathing vapours, mist or gas. Remove sources of heat, flame and ignition. All spill responders involved in a cleanup of this product must follow good industrial hygiene practices. A small spill can be handled routinely. Wear suitable protective equipment and eye protection to prevent skin and eye contact. Wear self-contained breathing apparatus.

**Respiratory Protection:** To avoid inhaling smoke/vapours, use self-contained breathing apparatus. Use only approved respirators by NIOSH or OSHA.

**Skin protection:** Wear suitable protective equipment to prevent skin contact. Nitrile gloves may be used. Wear sufficient clothing to prevent skin exposure.

**Eye and Face Protection:** Wear chemical goggles or full face protection.

**Footwear:** No specific recommendation.

**Other:** None

### 6.2 Environmental precautions

If safe to do so, cleanup spilled tablets and place in a secure container. Do not let this product remain in the environment. Ensure that spilled material does not enter sewers or natural waterways. If spill catches fire, the water used to extinguish the fire will contain a chemical which may be toxic in the environment.

### 6.3 Methods and materials for containment and cleanup

Clean up spills immediately. Sweep up tablets and place into an appropriate container for disposal. Avoid generating dusts and remove all sources of heat, ignition and flame. Tools use must be spark-proof. Once the spill has been remediated, arrange for disposal of the containers. Properly label containers to identify contents.

**Remedial Measures:** Do not use unprotected hands to collect spilled material. Ensure proper protective equipment is used to prevent contact with skin and eyes. Avoid the creation of dust.

**Large Spills:** Shovel spilled product into adequate compatible containers, skimming soil as well to ensure all released product and contaminated soil is recovered. Properly close and label all containers for disposal.

**Small Spills:** Scoop or sweep up spilled contents and place in appropriate containers for disposal. Avoid creation of dust.

### 6.4 Reference to other sections

For disposal, see Section 13.

## 7. Handling and Storage

### 7.1 Precautions for safe handling

**Handling Procedures:** Handle tablets with care not to create dusts. Avoid contact with skin, eyes and clothing. Empty containers retain product residue (vapour or dust). While handling the tablets, a residue on skin may be transferred to mouth by accident. Wash thoroughly and immediately after handling this product and before eating, drinking or smoking.

### 7.2 Conditions for safe storage, including incompatibilities

**Storage:** *Keep out of reach of children and animals.* Keep container closed when not in use and store in a dry area away from heat. Protect from sparks, heat or flame. Store separate from animal or human foodstuffs and away from strong acids.

### 7.3 Specific end use(s)

No other uses except those mentioned in Section 1.2

## 8. Exposure Controls, Personal Protection

### 8.1 Control parameters

#### Components with workplace control parameters

This product does not contain any ingredient with a known workplace exposure limit.

### 8.2 Exposure Controls

**Engineering Controls:** Only use outdoors where engineering controls are not required. Avoid breathing dust, vapours or smoke from burning these tablets.

**Respiratory Protection:** To avoid inhaling smoke/vapours, use self-contained breathing apparatus. Use only approved respirators by NIOSH or OSHA.

**Skin protection:** Wear suitable protective equipment to prevent skin contact. Nitrile gloves may be used. Wear sufficient clothing to prevent skin exposure.

**Eye and Face Protection:** Wear chemical goggles or full face protection.

**Footwear:** No specific recommendation.

**Other:** None

#### Control of environmental exposure

Prevent from entering the environment through natural waterways, sewers or drains.

## 9. Physical and Chemical Properties

### 9.1 Information on basic physical and chemical properties

<b>Appearance:</b>	Solid tablets, white
<b>Odour:</b>	Slight ammoniacal
<b>Odour Threshold:</b>	Not available
<b>pH:</b>	Not available
<b>Melting Point/Freezing Point:</b>	~ 280°C [Hexamethylenetetramine]
<b>Initial Boiling Point:</b>	Not determined
<b>Flash Point:</b>	250°C[Closed Cup]
<b>Evaporation Rate:</b>	Not available
<b>Flammability:</b>	Not flammable
<b>Upper Explosion Limit:</b>	Not available
<b>Lower Explosion Limit:</b>	Not available
<b>Vapour Pressure:</b>	<0.01hPa @ 20°C [Hexamethylenetetramine]
<b>Vapour Density:</b>	Not available
<b>Relative Density:</b>	1.2 – 1.4 gm/cc (water = 1)
<b>Solubility:</b>	Soluble
<b>Partition Coefficient:</b>	Log Pow = -2.179 @ 20°C [Hexamethylenetetramine]
<b>Autoignition Temperature:</b>	Not available
<b>Decomposition Temperature:</b>	Not available
<b>Viscosity:</b>	Not available
<b>Explosive Properties:</b>	Not available
<b>Oxidizing Properties:</b>	Not available
<b>Percent Volatiles:</b>	Not available

9.2 Other safety information: None

## 10. Stability and Reactivity

- 10.1 Reactivity**  
Reactive with strong acids. Hygroscopic, absorbing moisture from the air.
- 10.2 Chemical Stability**  
Stable under recommended storage conditions. Storage should be in a dry, cool area away from incompatibles, heat, sparks, flame and sources of ignition.
- 10.3 Possibility of hazardous reactions**  
No data available.
- 10.4 Conditions to avoid**  
Avoid exposure to moisture. Unintentional fire, during which irritating and toxic gases may be generated.
- 10.5 Incompatible materials**  
Strong oxidizing agents, strong acids, sodium peroxide.
- 10.6 Hazardous decomposition products**  
Irritating and possible toxic gases may be generated by thermal decomposition or combustion.

## 11. Toxicological Information

### 11.1 Information on toxicological effects

**Acute toxicity**

No GHS classification

**Skin corrosion/irritation**

No GHS classification

**Serious eye damage/eye irritation**

No GHS classification

**Respiratory or skin sensitization**

Skin sensitizer, Category 1, H317: May cause an allergic skin reaction.

**Germ Cell Mutagenicity**

No GHS classification

**Carcinogenicity**

No GHS classification. Not listed by IARC, ACGIH, NTP or OSHA.

**Reproductive toxicity**

No GHS classification

**Specific Target Organ Toxicity – Single exposure**

No GHS classification

**Specific Target Organ Toxicity – Repeated exposure**

No GHS classification

**Aspiration Hazard**

No GHS classification

**Aquatic Toxicity**

No GHS classification

**Additional information**

Component	LD <sub>50</sub>	LC <sub>50</sub>
Hexamethylenetetramine CAS No 100-97-0	>20,000 mg/kg (oral/rat) >2000 mg/kg (dermal/rat)	>2000 mg/m <sup>3</sup> (inh, rat/ 4 hr)

## 12. Ecological Information

### 12.1 Toxicity

Data: LC<sub>50</sub> (pimephales promelas) 49,800 mg/l, 96 hour static test, LC<sub>50</sub> (Cyprinodon variegates (sheepshead minnow) 49,000 mg/l, 96 hour  
EC<sub>50</sub> (Daphnia magna) Water Flea, 36,000 mg/l, 48hr

### 12.2 Persistence and degradability

No data available

### 12.3 Bioaccumulative potential

No data available

- 12.4 Mobility in soil**  
No data available
- 12.5 Results of PBT and vPvB assessment**  
Not conducted
- 12.6 Other adverse effects**  
No data available

## 13. Disposal Considerations

### 13.1 Waste treatment methods

**Product:**

Do not reuse empty containers. Dispose of product according to all applicable local, state (provincial), and federal regulations. Offer to a licensed disposal company, properly contained and labelled.

**Contaminated Packaging:**

As above

## 14. Transport Information

**Transport of Dangerous Goods (TDG and CLR):** UN 1328, Hexamethylenetetramine, Class 4.1, PG III

**United States Department of Transport (49CFR):** UN 1328, Hexamethylenetetramine, Class 4.1, PG III

**International Air Transport Association (IATA):** UN 1328, Hexamethylenetetramine, Class 4.1, PG III

**International Maritime Organization (IMO):** UN 1328, Hexamethylenetetramine, Class 4.1, PG III  
EmS No F-A, S-G, Stowage Category A



## 15. Regulatory Information

**CANADIAN FEDERAL REGULATIONS:**

CEPA, DOMESTIC SUBSTANCES LIST: Listed

**AMERICAN FEDERAL REGULATIONS:**

**CERCLA Hazardous Substance List (40 CFR 302.4)** Not regulated

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

**SARA 311/312 Hazardous chemical:** Fire hazard, Chronic health hazard

**SARA 313 (TRI reporting):** 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.

**Other State Regulations:**

**Massachusetts Right to Know Components:** No components are subject to the Massachusetts Right to Know Act

**Pennsylvania Right to Know Components:** Hexamethylenetetramine, CAS No 100-97-0  
Rev Date 2007-03-01

**New Jersey Right to Know Components:** Hexamethylenetetramine, CAS No 100-97-0  
Rev Date 2007-03-01

**California Prop 65 Components:** This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

**OTHER:**

None

## 16. Other Information

**Original Preparation Date:** November 12, 2015

**Prepared by:** Technical Department, Coghlan's Ltd.

**Disclaimer:** This Safety Data Sheet (SDS) was prepared using information provided by CCINFO, ingredient supplier SDS and other relevant sources. This product has been classified using weight of evidence, expert judgment and previous testing as per Part 1.3 of the Seventh Edition of The Globally Harmonized System of Classification and Labelling of Chemicals (GHS). The information in this SDS is offered for your consideration and guidance when exposed to this product. Coghlan's Ltd expressly disclaims all expressed or implied warranties and assumes no responsibilities for the accuracy or completeness of the data contained herein. The data in this SDS does not apply to use with any other product or in any other process.

***This Safety Data Sheet may not be changed, or altered in any way without the expressed knowledge and permission of Coghlan's Ltd.***

**Revisions:** May 28, 2018, Changes in Tables of Section 3 and 11