

# COGHLAN'S GHS Safety Data Sheet

## Section 1. Identification

**Product Name:** #529, #940BP Waterproof Matches  
**Synonyms:** Water-proof match  
**CAS Number:**  
**Product Use:** Ignition  
**Manufacturer/Supplier:** Coghlan's Ltd.  
**Address:** 121 Irene St.  
Winnipeg, MB CANADA  
R3T 4C7

**General Information:**  
**Transportation Emergency Number:** 1-877-264-4526

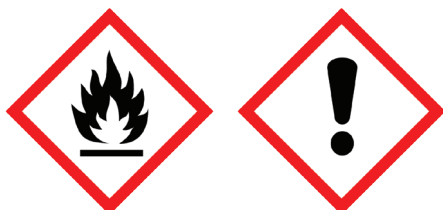
## Section 2. Hazards Identification

### GHS Classification:

Health	Environmental	Physical
<ul style="list-style-type: none"><li>• Acute Toxicity - Oral - Category 4</li><li>• Acute Toxicity - Category 4</li><li>• Skin Corrosion/Irritation - Category 3</li><li>• Serious eye damage/eye irritation - Category 2B</li><li>• Respiratory sensitization - Not classifiable</li><li>• Skin sensitization - Not classifiable</li><li>• Germ cell mutagenicity - not classifiable</li><li>• Carcinogenic - Not classifiable</li><li>• Toxic to reproductive - Not classifiable</li><li>• Specific target organ systemic toxicity single exposure - Not classifiable</li><li>• Specific target organ systemic toxicity repeated exposure - Not classifiable</li></ul>	<ul style="list-style-type: none"><li>• Hazard to the aquatic environment- Chronic hazard - Category 2</li><li>• Hazard to the aquatic environment- Acute hazard - Not classifiable</li></ul>	<ul style="list-style-type: none"><li>• Flammable Solid - Category 2</li></ul>

### GHS Label:

#### Symbol:



**Signal:** Danger

**Section 2. Hazards Identification (continued)**

<b>Symbols:</b> Flammable, irritant	
<p><u>Hazard Statements</u></p> <p>Flammable solid.                  Harmful if swallowed or if inhaled.                  May be harmful if in contact with skin.                  Causes mild skin irritation.                  Causes eye irritation.                  May be harmful to aquatic life.</p>	<p><u>Precautionary Statements</u></p> <p><b>Prevention</b> - Keep away from heat/sparks/openflames/hot surfaces. -No smoking.  <b>Response</b> - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  <b>Storage</b> - Store in a cool, dry, well-ventilated area away from sources of ignition, oxidizing agents, foodstuffs, and clothing and out of direct sunlight</p>

**Section 3. Composition/Information on Ingredients**

Component	CAS Number	Weight %
Potassium chlorate	3811-04-9	20-50
Rosin	8050-09-7	1-5
Quartz powder	14808-60-7	10-20
Bone Glue	9000-70-8	5-10
Sulfur powder	7704-34-9	5-10
Zinc oxide	1314-13-2	1-5
Potassium dichlorate	7778-50-9	0.1-1
Red phosphorus	7723-14-0	1-5
Antimony Oxide	18282-10-5	0.01-0.1

(See section 8 for Exposure Limits)

**Section 4. First Aid Measures**

**General Advice:** Consult a physician. Show this safety data sheet to the doctor in attendance.

**Inhalation:** Move to fresh air immediately. Get medical aid if symptoms persist.

**Skin Contact:** Wash affected area with soap and water. If symptoms develop seek medical attention.

**Eye Contact:** In case of contact with eyes, rinse immediately with plenty of water. Get medical aid if symptoms persist.

**Ingestion:** Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Wash mouth out with water. Get medical aid.

**Main Symptoms:** Not available.

**Protection of Emergency:** Not available.

**Medical Attention:** Not available.

**Notes to Physician:** Treat symptomatically.

## **Section 5. Fire Fighting Measures**

**General Information:** Not available.

**Extinguishing Media:** Carbon dioxide, water spray, water

**Unsuitable Extinguishing Media:** Not available.

**Fire & Explosion Hazard:** This product is flammable solid. This product will burn if exposed to fire.

**Special Fire Fighting Methods:** Not available.

**Special Protective Equipment for Firefighters:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, and full protective gear.

## **Section 6. Accidental Release Measures**

**General Information:** Wear appropriate personal protective equipment and clothing to minimize exposure.

**Spills/Leaks:** Extinguish or remove all sources of ignition and stop leak if safe to do so. Increase ventilation. Evacuate all unnecessary personnel. If possible contain the spill. Use clean non-sparking tools to collect the material and place into a suitable labeled container. Dispose of waste according to federal, Environmental Protection Authority and state regulations. If large quantities of this material enter the waterways contact the Environmental Protection Authority or your local Waste Management Authority.

## **Section 7. Handling and Storage**

### **HANDLING**

**Technical Measures:** Not available.

**Ventilation:** Use approved storage containers in the work area.

**Precaution:** Ensure a high level of personal hygiene is maintained when using this product. That is; always wash hands before eating, drinking, smoking or using the toilet.

**Precaution for Safe Handling:** Keep material away from sparks, flames and other ignition sources. Post "NO SMOKING" signs in area of use. Do not use near welding operations, flames or hot surfaces. Prevent release of vapors and mists into workplace air. Use smallest possible amounts in designated areas with adequate ventilation. Have emergency equipment (for fires, spills, leaks, etc.) readily available. Label containers. Keep containers closed when not in use. Empty containers may contain residues, which are hazardous.

### **STORAGE**

**Technical Measures:** Not available.

**Conditions for Safe Storage:** Store in a cool, dry, well-ventilated area away from sources

## Section 7. Handling and Storage (continued)

of ignition, oxidizing agents, foodstuffs, and clothing and out of direct sunlight. Keep containers closed when not in use and securely sealed and protected against physical damage. Inspect regularly for deficiencies such as damage or leaks. Have appropriate fire extinguishers available in and near the storage area. Take precautions against static electricity discharges. Use proper grounding procedures. Do not stack more than 3 pallets high.

**Safety Packaging Material:** Always keep in containers made of the same material as the supply container.

**INCOMPATIBILITIES:** Strong oxidizing agents, strong acids and strong alkalis.

**PRECAUTION:** Not available.

## Section 8. Exposure Controls / Personal Protection

**Engineering Measures:** Provide sufficient ventilation to keep airborne levels below the exposure limit. Where vapors or mists are generated, particularly in enclosed areas, and natural ventilation is inadequate, a flameproof exhaust ventilation system is required.

**Control Parameter:**

Rosin (CAS# 8050-09-7):

United Kingdom, WEL - TWA: 0.05 mg/m<sup>3</sup> TWA (fume)

United Kingdom, WEL - STEL: 0.15 mg/m<sup>3</sup> STEL (fume)

**Individual Protection**

**Respiratory Protection:** For most situations, no respiratory protection should be needed; however, in any tire, use an approved respirator.

**Hand Protection:** Wash hands after use and before eating.

**Eye Protection:** Wear appropriate protective glasses or chemical safety goggles.

**Skin Protection:** Wear appropriate protective gloves to prevent skin exposure. The glove material has to be impermeable and resistant to the product. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

## Section 9. Physical and Chemical Properties

<b>Appearance</b>	Solid, Red match head, woody matchstick
<b>Odor</b>	Odorless
<b>Ph</b>	<4.7
<b>Melting Point</b>	Not applicable
<b>Initial Boiling</b>	Point Not applicable
<b>Flash Point</b>	28°C
<b>Flammability</b>	Flammable

### Section 9. Physical and Chemical Properties (continued)

Explosive Limits	Lower: Not available. Upper: Not available.
Vapor Pressure	Not applicable
Specific Gravity	2.477
Relative Vapor Density (air=1)	NOT applicable
Evaporation Rate	Not applicable
Relative Density (water=1)	1.3
Viscosity	Not applicable
Solubility in water	Insoluble
Solubility in alcohol	Insoluble
Partition Coefficient	Not available
Decomposition Temperature	Not available
Autoignition Temperature	≥ 160° C

### Section 10. Stability and Reactivity

**Chemical Stability:** Stable under normal conditions of storage and handling.

**Hazardous Reactions:** No information available.

**Conditions to Avoid:** High temperature, sparks, flames and other ignition sources.

**Incompatible Materials:** Strong oxidizing agents, strong acids and strong alkalis.

**Hazardous Decomposition Products:** Oxides of silicon, carbon

**Hazardous Polymerization:** Will not occur.

### Section 11. Toxicological Information

**RTECS#:**

**LD50/LC50:**

**Potassium chlorate:** (CAS# 3811-04-9)

**Oral rat LD50:** 1870 mg/kg; Human (unknown route) LDlo: 429 mg/kg.

**Quartz powder:** (CAS# 7631-86-9)

**Draize test, rabbit, eye:** 25 mg/24H Mild;

**Rosin:** (CAS# 8050—09-7)

**Inhalation, rat:** LC50 = 110 mg/m<sup>3</sup>;

**Oral, mouse:** LD50 = 2.2 mg/kg;

**Oral, rat:** LD50 = 3.0 mg/kg;

**Skin Corrosion/Irritation:** No information available.

**Eye Damage/ Eye Irritation:** No information available.

### **Section 11. *Toxicological Information (continued)***

**Respiratory or Skin Sensitization:** No information available.

**Germ Cell Mutagenicity:** No information available.

**Carcinogenicity:** Not listed as a carcinogen by ACGIH, IARC, NTP

**Toxic to Reproduction:** No information available.

**STOST-Single Exposure:** May cause respiratory irritation.

**STOST-Repeated Exposure:** No information available.

**Inhalation Hazard:** No information available.

**Epidemiology:** No information available.

**Teratogenicity:** No information available.

**Reproductive Effects:** No information available.

**Neurotoxicity:** No information available.

### **Section 12. *Ecological information***

**Ecotoxicity:** No information available.

**Persistence and Degradability:** No information available.

**Bioaccumulation Potential:** No information available.

**Mobility in Soil:** No information available.

**Other Adverse Effects:** No information available.

### **Section 13. *Disposal Considerations***

**Waste Property:** No information available.

**Disposal:** Dispose of waste according to relative regulations. Labels should not be removed from containers until they have been cleaned. Do not cut, puncture or weld on or near containers.

**Waste precaution:** Contaminated packaging: Empty containers may contain hazardous residues. Contaminated containers must not be treated as household waste. Containers should be cleaned by appropriate methods and then re-used or disposed of by landfill or incineration as appropriate. Do not incinerate closed containers.

**RCRA P-Series:** None listed.

**RCRA U-Series:** None listed.

## Section 14. Transport Information

UN Classification: 4.1 class 4.1 — Flammable Solid

UN Number: 1944

UN Proper Shipping Name: Matches, safety

Packing Group: III



Transport Attention: -

Canada TDG: 4.1 class 4.1 — Flammable Solid

DOT: Proper Shipping Name: Matches, safety

Packing Group: III

UN Number: 1944

Hazard Class: 4.1 class 4.1 — Flammable Solid

## Section 15. Regulatory Information

### US FEDERAL

#### TSCA

CAS# 3811-04-9 is listed on the TSCA inventory.

CAS# 8050-09-7 is listed on the TSCA inventory.

### European/International Regulations

#### European Labeling in Accordance with EC Directives

Hazard Symbols: F, N, Xn



#### Risk Phrases:

R8: Contact with combustible material may cause fire.

R20/22: Harmful by inhalation and if swallowed.

R48/20: Harmful: danger of serious damage to health by prolonged exposure through inhalation.

**Section 15. Regulatory Information (continued)**

R43: May cause sensitization by skin contact.

R5 1/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Safety Phrases:**

S17 Keep away from combustible materials

S22 Do not breathe dust

S36 Wear suitable protective clothing

S37 Wear suitable gloves

S45 In case of accident or if you feel unwell seek medical advice immediately

S29 Do not empty into drains

S61 Avoid release to the environment. Refer to special instruction/ Material safety data sheets

**Section 16. Other information**

**Disclaimer:** The information contained herein is accurate to the best of our knowledge. My Company makes no warranty of any kind, express or implied, concerning the safe use of this material in your process or in combination with other substances.