

1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

PRODUCT IDENTIFIER Safety matches

RECOMMENDED USE Ignition

Product Name Coghlan's #8647/#8649 Tinder

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2. HAZARDS IDENTIFICATION

GHS CLASSIFICATION

Physical and Chemical Hazard	Flammable solids	Category 2
Health Hazard	Acute toxicity-Oral	Category 4
	Acute toxicity-Dermal	Category 5
	Acute toxicity-Inhalation	Category 4
	Skin corrosion/irritation	Category 3
	Serious eye damage/eye irritation	Category 2B
	Respiratory sensitization	Not classifiable.
	Skin sensitization	Not classifiable.
	Germ cell mutagenicity	Not classifiable.
	Carcinogenic	Not classifiable.
	Toxic to reproductive	Not classifiable.
Environment Hazard	Specific target organ systemic toxicity Single exposure	Not classifiable.
	Specific target organ systemic toxicity Repeated exposure	Not classifiable.
	Hazard to the aquatic environment-Chronic hazard	Category 2
	Hazard to the aquatic environment-Acute hazard	Not classifiable.

GHS LABEL ELEMENTS

Symbol



Signal	Danger
Hazard Statement	Flammable solid Harmful if swallowed or if inhaled May be harmful in contact with skin. Causes mild skin irritation. Causes eye irritation Toxic to aquatic life.
Precautionary Statement	
Prevention	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Response	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Storage	Store in a cool, dry, well-ventilated area away from sources of ignition, oxidizing agents, foodstuffs, and clothing and out of direct sunlight.
Other Risk not Covered by GHS	-
Any National or Regional Information	Classification according to EU Directives 67/548/EEC or 1999/45/EC F, N, Xn R8 R20/22 R48/20 R43 R51/53

3. COMPOSITION/INFORMATION ON INGREDIENTS

Single / Mixtures	Mixtures
Chemical name(or common name)	Safety matches
Synonyms	-

Ingredients Name	CAS No.	Formula	Content (%)	EINECS No.
Potassium chlorate	3811-04-9	KClO ₃	50	223-289-7
Bone glue	9000-70-8	-	12	232-554-6
Rosin	8050-09-7	C ₂₀ H ₃₀ O ₂	2	232-475-7
Quartz powder	14808-60-7	SiO ₂	20	238-878-4
Other Ingredients			3	
Zinc oxide	1314-13-2	ZnO ₂	5	215-222-5
Boric Acid	10043-35-3	H ₃ BO ₃	1	233-139-2
Starch	9005-25-8	(C ₆ H ₁₀ O ₅) _n	2	232-679-6
Aluminum hydroxide	21645-51-2	AlH ₃ O ₃	1	244-492-7
Red phosphorus	7723-14-0	P	1-5	231-768-7
Antimony oxide	18282-10-5	SnO ₂	0.01-0.1	242-159-0

Impurities or Additives that contribute to Classified material	Not available.
Molecular weight	-
TSCA Inventory	-
EC INDEX NUMBER	-

4 . FIRST AID MEATUES

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.

5 . FIRE FIGHTING MEATURES

General Information	Not available.
Extinguishing Media	Carbon dioxide, water spay, 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.

6 . ACCIDENT 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.

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 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.

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/m³ TWA (fume)
 United Kingdom, WEL - STEL: 0.15 mg/m³ STEL (fume)

Individual Protection

Respiratory Protection For most situations, no respiratory protection should be needed; however, in any fire, 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.
Clothing Protection	-

9 . PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Solid. Red match head, woody matchstick
Odor	Odorless
Ph	<4.7
Melting Point	Not applicable
Initial Boiling Point	Not applicable
Flash Point	Not applicable
Flammability	Flammable
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
alcohol	Insoluble
Partition Coefficient	Not available.

1 0 . 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.

1 1 . TOXICOLOGICAL INFORMATION

RTECS#:	-
LD₅₀/LC₅₀:	Potassium chlorate (CAS# 3811-04-9) Oral rat LD ₅₀ : 1870 mg/kg; Human (unknown route) LD ₁₀ : 429 mg/kg. Quartz powder (CAS# 7631-86-9) Draize test, rabbit, eye: 25 mg/24H Mild; Rosin (CAS# 8050-09-7) Inhalation, rat: LC ₅₀ = 110 mg/m ³ ; Oral, mouse: LD ₅₀ = 2.2 mg/kg; Oral, rat: LD ₅₀ = 3.0 mg/kg; Boric Acid (CAS#10043-35-3) LD ₅₀ Oral - rat - 2.660 mg/kg Antimony oxide (CAS# 18282-10-5) LD ₅₀ Oral - rat - > 20.000 mg/kg
Skin Corrosion/Irritation	No information available.
Eye Damage/Eye Irritation	No information available.
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.
Others	-

1 2 . 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.

1 3 . DISPOSAL CONSIDERATION (INCLUDING CONTAINER)

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.

1 4 . 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

1 5 . REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

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.

R43: May cause sensitization by skin contact.

R51/53: 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 seeks medical advice immediately

S29 Do not empty into drains

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

1 6 . 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.