

Name, address, and telephone number of



Coghlan's 7870 Magnesium Fire Starter

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## SAFETY DATA SHEET

## **SECTION 1. IDENTIFICATION**

Product identifier used on the label

: Coghlan's 7870 Magnesium Fire Starter

Other means of identification: 7870

Recommended use of the chemical and restrictions on use

Fire starting

Recommended restrictions: Keep out of reach of children.

Chemical family : Mixture of: Metal compounds

Name, address, and telephone number

of the supplier: the manufacturer: Coghlan's Ltd. Refer to supplier

121 Irene Street Winnipeg, MB, Canada

R3T 4C7

Supplier's Telephone # : (204) 284 9550 **24 Hr. Emergency Tel #** : +1(877) 264 4526

#### SECTION 2. HAZARDS IDENTIFICATION

#### Classification of the chemical

Black/grey metallic, Solid. Weak Odour

Classification for this preparation is based upon its use as a fire starter by making shavings and small particulate from the metal block. As shipped in mass form, this preparation is not considered to be a hazardous product and is not classifiable under the requirements of GHS.

#### Label elements

Hazard pictogram(s)

None required under U.S. OSHA Hazcom 2012 and Canadian WHMIS 2015 regulations.

Signal Word

No signal word

Hazard statement(s)

None required.

Precautionary statement(s)

Keep out of reach of children.

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources - No smoking. In case of fire: Use carbon dioxide, dry sand, dry chemical or alcohol-resistant foam for extinction.

## Other hazards

Other hazards which do not result in classification:

Risks of burning off for fine material or explosions after raising the dust. Toxic fumes, gases or vapours may evolve on burning. Inhalation of fumes may result in metal fume fever, a flu-like illness. May cause gastrointestinal irritation.

#### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS





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Chemical name	Common name and synonyms	CAS#	Concentration (% by weight)
Magnesium	Mg	7439-95-4	68.00
Iron	Fe	7439-89-6	17.90
Cerium	Се	7440-45-1	9.20
Lanthanum	La	7439-91-0	4.90

#### SECTION 4. FIRST-AID MEASURES

#### Description of first aid measures

Ingestion : Never give anything by mouth to an unconscious person. Do NOT induce vomiting.

Rinse mouth thoroughly.. Consult a physician.

Inhalation : If the product is heated, damaged or processed (e.g. cut, grinded), and exposure

occurs, the following methods are recommended: If breathed in, move person into fresh air. If breathing has stopped, give artificial respiration. If breathing is difficult, give oxygen by qualified medical personnel only. If irritation or symptoms develop,

seek medical attention.

If the product is heated, damaged or processed (e.g. cut, grinded), and exposure Skin contact

occurs, the following methods are recommended: For skin contact, wash with soap and water while removing contaminated clothing. If irritation persists, seek prompt

medical attention. Launder clothing before reuse.

If the product is heated, damaged or processed (e.g. cut, grinded), and exposure Eye contact

> occurs, the following methods are recommended: In case of eve contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at

least 15 minutes. If irritation persists, seek prompt medical attention.

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

Inhalation of dusts may cause respiratory irritation. May cause coughing and breathing difficulties. Inhalation of fumes may result in metal fume fever, a flu-like illness. Symptoms of metal fume fever may include fever, fatigue, vomiting, muscle aches and

shortness of breath.

Direct eye contact may cause slight or mild, transient irritation. Iron particles in the eye may leave a "rust ring" or brownish stain on the cornea.

Direct skin contact may cause slight or mild, transient irritation. Direct skin contact may cause temporary redness.

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

: Provide general supportive measures and treat symptomatically.

## SECTION 5. FIRE-FIGHTING MEASURES

#### Extinguishing media

Suitable extinguishing media

: Use media suitable to the surrounding fire such as water fog or fine spray, alcohol foams, carbon dioxide and dry chemical.

Unsuitable extinguishing media

: None known.

## Special hazards arising from the substance or mixture / Conditions of flammability

: Flammable solid. Toxic fumes, gases or vapors may evolve on burning. Closed containers may rupture if exposed to excess heat or flame due to a build-up of internal pressure.

## Flammability classification (OSHA 29 CFR 1910.106)

: Not flammable under normal conditions of handling.

## **Hazardous combustion products**

: Metal oxides: Other unidentified organic compounds.

#### Special protective equipment and precautions for firefighters



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#### Protective equipment for fire-fighters

: Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Do not enter without wearing specialized protective equipment suitable for the situation. Firefighter's normal protective clothing (Bunker Gear) will not provide adequate protection. A full-body encapsulating chemical protective suit with positive pressure self-contained breathing apparatus (NIOSH approved or equivalent) may be necessary.

#### Special fire-fighting procedures

Move containers from fire area if safe to do so. Water spray may be useful in cooling equipment exposed to heat and flame. Do not allow run-off from fire fighting to enter drains or water courses. Dike for water control.

#### SECTION 6. ACCIDENTAL RELEASE MEASURES

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

: Restrict access to area until completion of clean-up. Ensure clean-up is conducted by trained personnel only. All persons dealing with the clean-up should wear the appropriate chemically protective equipment. Refer to protective measures listed in sections 7 and 8.

## **Environmental precautions**: Ensure spilled product does not enter drains, sewers, waterways, or confined spaces. **Methods and material for containment and cleaning up**

: Ventilate area of release. Eliminate all ignition sources. Stop the spill at source if it is safe to do so. Use inert, non-combustible absorbents to assist the pick up of material. Pick up and transfer to properly labeled containers. Contact the proper local authorities.

#### Special spill response procedures

If a spill/release in excess of the EPA reportable quantity is made into the environment, immediately notify the National Response Center in the United States (phone: 1-800-424-8802).

US CERCLA Reportable quantity (RQ): None reported.

In Canada: Dispose of in accordance with federal, provincial and local hazardous waste laws.

#### SECTION 7. HANDLING AND STORAGE

#### Precautions for safe handling

: Do not subject to excessive friction or mechanical shock. Use with adequate ventilation. Avoid breathing vapors, fumes or dust. Wash thoroughly after handling. Keep out of reach of children.

#### Conditions for safe storage

Keep striker away from friction causing materials, heat, flame, and sources of ignition. Store in a cool, dry, well ventilated area. Keep away from incompatibles. Store away from areas of excessive heat, open flames, sparks, and other possible sources of ignition. Keep container tightly closed.

## Incompatible materials

: Strong oxidizing agents



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## SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits:				
Chemical Name	ACGIH	TLV	OSHA	PEL
	<u>TWA</u>	STEL	<u>PEL</u>	STEL
Magnesium	N/Av	N/Av	N/Av	N/Av
Iron	N/Av	N/Av	N/Av	N/Av
Cerium	N/Av	N/Av	N/Av	N/Av
Lanthanum	N/Av	N/Av	N/Av	N/Av

## **Exposure controls**

Ventilation and engineering measures

: Use with adequate ventilation. Provide sufficient ventilation to keep vapour concentration below the given TLV and/or PEL. If product is processed in a manner that generates dusts or fumes, provide mechanical ventilation to control airbourne exposure levels. Use explosion-proof electrical and ventilating equipment.

**Respiratory protection**: Respiratory protection is required if the concentrations exceed the TLV.

NIOSH-approved respirators are recommended. Seek advice from respiratory

protection specialists.

**Skin protection**: For prolonged skin exposure, gloves impervious to the material are recommended.

Advice should be sought from glove suppliers. Wear sufficient clothing to prevent skin

contact.

**Eye / face protection**: Safety goggles or glasses as appropriate for the job.

Other protective equipment : An eyewash station and safety shower should be made available in the immediate

working area. Other equipment may be required depending on workplace standards.

General hygiene considerations

: Avoid breathing vapors, fumes or dust. Avoid contact with skin, eyes and clothing. Upon completion of work, wash hands before eating, drinking, smoking or use of toilet facilities. Remove soiled clothing and wash it thoroughly before reuse. Handle in accordance with good industrial hygiene and safety practice.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State : Solid

Colour : Black/grey metallic
Odour : Weak Odour
Odour threshold : Not applicable.

PH : Not applicable.

Melting Point/Freezing point : Not available.

Initial boiling point and boiling range

: Not available.

Flash point : None.

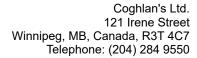
Flashpoint (Method) : Not applicable.

Evaporation rate (BuAe = 1) : Not available.

Flammability : Not flammable.

Lower explosion or flammability limit (% by vol.)

Not available.





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Upper explosion or flammability limit (% by vol.)

: Not available.

Oxidizing properties : None known.

Explosive properties : Not explosive

Vapour pressure : Not applicable.

Relative vapour density : Not available.

Relative density / Specific gravity

: Not available.

Solubility in water : Insoluble.

Other solubility(ies) : Not applicable.

Partition coefficient: n-octanol/water or Coefficient of water/oil distribution

: Not available.

Auto-ignition temperature : Not available.

Decomposition temperature : Not available.

Viscosity : Not available.

Particle characteristics : Not available

Volatiles (% by weight) : Not available.

**Volatile organic Compounds (VOC's)** 

: Not applicable.

Absolute pressure of container

: Not applicable.

Flame projection length : Not applicable.

Other physical/chemical comments

: No additional information.

#### SECTION 10. STABILITY AND REACTIVITY

**Reactivity**: Not normally reactive.

Chemical stability : Material is stable under normal conditions.

Possibility of hazardous reactions

: Hazardous polymerization does not occur.

Conditions to avoid : Avoid excessive heat, sparks and open flame. Avoid contact with incompatible

materials.

**Incompatible materials**: Incompatible materials (see Section 7).

Hazardous decomposition products

: None known, refer to hazardous combustion products in Section 5.

#### SECTION 11. TOXICOLOGICAL INFORMATION

## Information on likely routes of exposure:

Routes of entry inhalation : YES
Routes of entry skin & eye : YES
Routes of entry Ingestion : YES
Routes of exposure skin absorption
: NO



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## **Potential Health Effects:**

## Signs and symptoms of short-term (acute) exposure

Sign and symptoms Inhalation

: If the product is heated, damaged or processed (e.g. cut, grinded), hazardous

properties may include the following:

Inhalation of dusts may cause respiratory irritation. May cause coughing and breathing difficulties. Inhalation of fumes may result in metal fume fever, a flu-like illness.

Symptoms of metal fume fever may include fever, fatigue, vomiting, muscle aches and

shortness of breath.

Sign and symptoms ingestion

: Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Sign and symptoms skin

: Direct skin contact may cause slight or mild, transient irritation.

Sign and symptoms eyes

May cause mild irritation, redness and watering. Iron particles in the eye may leave a

"rust ring" or brownish stain on the cornea.

**Potential Chronic Health Effects** 

: Prolonged or repeated overexposure could cause adverse liver effects.

If the product is heated, damaged or processed (e.g. cut, grinded), hazardous

properties may include the following:

Prolonged or repeated inhalation of dusts could cause lung disease (pneumoconiosis).

: Not expected to be mutagenic in humans. No data available to indicate product or any

components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity** : Not classifiable as a human carcinogen.

No components are listed as carcinogens by ACGIH, IARC, OSHA or NTP.

Reproductive effects & Teratogenicity

: This product is not expected to cause reproductive or developmental effects.

Sensitization to material

: Not expected to be a skin or respiratory sensitizer.

Specific target organ effects:

According to the classification criteria of U.S. OSHA regulations (29CFR 1910.1200) (Hazcom 2012) and Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015), this product is not expected to cause target organ toxicity through

single or repeated exposures.

Medical conditions aggravated by overexposure

: Pre-existing skin, eye and respiratory disorders.

Synergistic materials

: Not available.

Toxicological data

Mutagenicity

: Not classified for acute toxicity based on available data. No data is available on the

product itself.

See below for individual ingredient acute toxicity data.

	LC50(4hr)	LD	50
Chemical name	<u>inh, rat</u>	(Oral, rat)	(Rabbit, dermal)
Magnesium	N/Av	N/Av	N/Av
Iron	N/Av	30,000 mg/kg	N/Av
Cerium	N/Av	N/Av	N/Av
Lanthanum	N/Av	N/Av	N/Av

#### Other important toxicological hazards

: None known or reported by the manufacturer.



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#### SECTION 12. ECOLOGICAL INFORMATION

**Ecotoxicity** 

: No data is available on the product itself. The product should not be allowed to enter drains or water courses, or be deposited where it can affect ground or surface waters. See the following tables for individual ingredient ecotoxicity data.

#### Ecotoxicity data:

<u>Ingredients</u>	040#	Toxicity to Fish				
	CAS#	LC50 / 96h	NOEC / 21 day	M Factor		
Magnesium	7439-95-4	N/Av	N/Av	N/Av		
Iron	7439-89-6	> 10 000 mg/L (Zebra fish) (Read-across)	N/Av	None.		
Cerium	7440-45-1	N/Av	N/Av	None.		
Lanthanum	7439-91-0	N/Av	N/Av	None.		

<u>Ingredients</u>	CAS#	Toxicity to Daphnia				
		EC50 / 48h	NOEC / 21 day	M Factor		
Magnesium	7439-95-4	N/Av	N/Av	N/Av		
Iron	7439-89-6	> 100 mg/L (Daphnia magna) (Read-across)	5.9 mg/L (Read-across)	None.		
Cerium	7440-45-1	N/Av	N/Av	None.		
Lanthanum	7439-91-0	N/Av	N/Av	None.		

<u>Ingredients</u>	CAS#	AS# Toxicity to Algae				
		EC50 / 96h or 72h	NOEC / 96h or 72h	M Factor		
Magnesium	7439-95-4	N/Av	N/Av	N/Av		
Iron	7439-89-6	N/Av	N/Av	None.		
Cerium	7440-45-1	N/Av	N/Av	None.		
Lanthanum	7439-91-0	N/Av	N/Av	None.		

#### Persistence and degradability

: Biodegradation is not applicable to inorganic substances.

**Bioaccumulation potential**: No data is available on the product itself.

<b>Components</b>	Partition coefficient n-octanol/water (log Kow)	Bioconcentration factor (BCF)
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**Mobility in soil** : No data is available on the product itself.

#### Other Adverse Environmental effects

: No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.



COGHLAN'S.

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#### SECTION 13. DISPOSAL CONSIDERATIONS

**Handling for Disposal** 

: Handle in accordance with good industrial hygiene and safety practice. Refer to protective measures listed in sections 7 and 8. This material and its container must be disposed of in a safe way.

**Methods of Disposal** 

: Dispose in accordance with all applicable federal, state, provincial and local regulations.

**RCRA** 

If this product, as supplied, becomes a waste in the United States, it may meet the criteria of a hazardous waste as defined under RCRA, Title 40 CFR 261. It is the responsibility of the waste generator to determine the proper waste identification and disposal method. For disposal of unused or waste material, check with local, state and federal environmental agencies.

#### SECTION 14. TRANSPORT INFORMATION

Regulatory Information	UN Number	UN proper shipping name	Transport hazard class(es)	Packing Group	Label
49CFR/DOT	None.	Not regulated.	not regulated	none	$\otimes$
49CFR/DOT Additional information	None.		!		
ICAO/IATA	None.	Not regulated.	not regulated	none	$\otimes$
ICAO/IATA Additional information	None.	!			
TDG	None.	Not regulated.	not regulated	none	$\otimes$
TDG Additional information	None.				
IMDG	None.	Not regulated.	not regulated	none	$\otimes$
IMDG Additional information	None.	!	!	!	

Special precautions for user : Note: The product is not in a powder state, it is a block solid, and it is relatively hard. Generally, the powder will not come out when rubbed against the goods. It must be scraped continously with a knife with a hardness of 60HRC, so that the powder ill come out. This product will not burn if it is placed on a fire for 10 minutes continously, so it can be transported as ordinary cargo.

**Environmental hazards** 

This product does not meet the criteria for an environmentally hazardous mixture. according to the IMDG Code. See Section 12 for more environmental information. Coghlan's 7870 Magnesium Fire Starter SDS Preparation Date (mm/dd/yyyy): 06/20/2023

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## **SECTION 15 - REGULATORY INFORMATION**

#### **US Federal Information:**

Components listed below are present on the following U.S. Federal chemical lists:

<u>Ingredients</u>		TSCA	CERCLA Reportable	SARA TITLE III: Sec. 302, Extremely	SARA TITLE III: Sec. 313, 40 CFR 372, Specific Toxic Chemical		
	CAS#	Inventory	Quantity(RQ) (40 CFR 117.302):	Hazardous Substance, 40 CFR 355:	Toxic Chemical	de Minimis Concentration	
Magnesium	7439-95-4	Yes	N/Ap	N/Av	No	No	
Iron	7439-89-6	Yes	None.	None.	No	No	
Cerium	7440-45-1	Yes	N/Ap	N/Av	No	No	
Lanthanum	7439-91-0	Yes	N/Ap	N/Av	No	No	

SARA TITLE III: Sec. 311 and 312, SDS Requirements, 40 CFR 370 Hazard Classes: None reported. .

Under SARA Sections 311 and 312, the EPA has established threshold quantities for the reporting of hazardous chemicals. The current thresholds are 500 pounds or the threshold planning quantity (TPQ), whichever is lower, for extremely hazardous substances and 10,000 pounds for all other hazardous chemicals.

## **US State Right to Know Laws:**

The following chemicals are specifically listed by individual States:

<u>Ingredients</u>	CAS#	California Proposition 65		State "Right to Know" Lists					
	<b>0Α0</b> #	Listed	Type of Toxicity	CA	MA	MN	NJ	PA	RI
Magnesium	7439-95-4	No	N/Ap	Yes	Yes	No	Yes	Yes	Yes
Iron	7439-89-6	No	N/Ap	Yes	No	No	No	No	No
Cerium	7440-45-1	No	N/Ap	No	No	No	Yes	No	No
Lanthanum	7439-91-0	No	N/Ap	No	No	No	No	No	No

#### **Canadian Information:**

Canadian Environmental Protection Act (CEPA) information: All ingredients listed appear on the Domestic Substances List (DSL).

#### **International Information:**

Components listed below are present on the following International Inventory list:





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<u>Ingredients</u>	CAS#	European EINECs	Australia AICS	Philippines PICCS	Japan ENCS	Korea KECI/KECL	China IECSC	NewZealand IOC
Magnesium	7439-95-4	231-104-6	Present	Present	N/Av	KE-22673	Present	HSR001470
Iron	7439-89-6	231-096-4	Present	Present	Not listed	KE-21059	Present	May be used as a single component chemical under an appropriate group standard.
Cerium	7440-45-1	231-154-9	Present	Present	N/Av	KE-05379	N/Av	HSR006252
Lanthanum	7439-91-0	231-099-0	Present	Present	N/Av	KE-21820	N/Av	Present

#### **SECTION 16. OTHER INFORMATION**

#### Legend

: ACGIH: American Conference of Governmental Industrial Hygienists

AICS: Australian Inventory of Chemical Substances

CAS: Chemical Abstract Services

CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act

of 1980

CFR: Code of Federal Regulations DOT: Department of Transportation

**ENCS: Existing and New Chemical Substances** 

EPA: Environmental Protection Agency HSDB: Hazardous Substances Data Bank

IARC: International Agency for Research on Cancer

IATA: International Air Transport Association

IBC: Intermediate Bulk Container

ICAO: International Civil Aviation Organisation IECSC: Inventory of Existing Chemical Substances IMDG: International Maritime Dangerous Goods

Inh: Inhalation

IOC: Inventory of Chemicals

KECI: Korean Existing Chemicals Inventory KECL: Korean Existing Chemicals List

LC: Lethal Concentration

LD: Lethal Dose N/Ap: Not Applicable N/Av: Not Available

NIOSH: National Institute of Occupational Safety and Health

NOEC: No observable effect concentration

NTP: National Toxicology Program

OECD: Organisation for Economic Co-operation and Development

OSHA: Occupational Safety and Health Administration

PEL: Permissible exposure limit

PICCS: Philippine Inventory of Chemicals and Chemical Substances

RTECS: Registry of Toxic Effects of Chemical Substances SARA: Superfund Amendments and Reauthorization Act

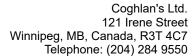
STEL: Short Term Exposure Limit

TDG: Canadian Transportation of Dangerous Goods Act & Regulations

TLV: Threshold Limit Values

TSCA: Toxic Substance Control Act TWA: Time Weighted Average

WHMIS: Workplace Hazardous Materials Identification System





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References : 1. ACGIH, Threshold Limit Values for Chemical Substances and Physical Agents &

Biological Exposure Indices

2. ECHA - European Chemical Agency

3. Canadian Centre for Occupational Health and Safety, CCInfoWeb databases

4. Safety Data Sheets from manufacturer.

5. US EPA Title III List of Lists

6. California Proposition 65 List

7. OECD - The Global Portal to Information on Chemical Substances - eChemPortal

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Other special considerations for handling

: Provide adequate information, instruction and training for operators.

## Prepared for:

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Website: https://www.coghlans.com



#### Prepared by:

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http://www.thecompliancecenter.com



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