



SAFETY DATA SHEET

This Safety Data Sheet complies with the Canadian Hazardous 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:** #1005 Flint Striker and Flint Striker portion ONLY in 8634 and 8746
- 1.2 **Other Means of Identification:** None
- 1.3 **Product Use:** Flint striker
- 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
Email: info@coghlan.com
- Supplier:** As above
- 1.6 **Emergencies:** +1(877) 264-4526

2. Hazards Identification

2.1 **Classification of product or mixture**

This product is an untested preparation. *GHS classification for this preparation is based upon its use as a flint striker by striking by friction to product sparks from the metal striker.* As shipped in mass form, this preparation is not considered to be a hazardous product and is not classifiable under the requirements of GHS.

GHS Classification: Flammable Solids, Category 1

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

Pictogram:



Signal Word:

Danger

GHS Hazard Statements: H228: Flammable Solid

GHS Precautionary Statements:

Prevention: P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280: Wear protective gloves, eye and face protection

Response: P370+P378: In case of fire use water as first choice. Sand, earth, dry chemical, foam or CO₂ may be used to extinguish.

Storage: None

Disposal: None

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS: If particles are fine or dust is produced, risk of explosion may exist.

2.4 Additional Information

Primary Routes of Entry:

Skin Contact: No
Skin Absorption: No
Eye Contact: No
Ingestion: No
Inhalation: No

Emergency Overview: When using the striker bar to produce sparks, care must be taken to prevent injury by burns to skin and eyes. When burned, fumes and smoke may be irritating to the respiratory tract.

Effects of Short-Term (Acute) Exposure:

Inhalation: This preparation is used to help start fires. The resulting smoke from burning any organic material may be hazardous to the respiratory tract. Prolonged or repeated inhalation may cause target organ damage (lungs).

Skin Contact: Skin contact with ignited product will cause significant burns.

Eye Contact: Sparks from the striker bar will cause extreme burns if allowed in contact with the eye. Smoke or vapours from the burning product may cause transient eye discomfort.

Ingestion: Accidental ingestion is unlikely due to form of product.

Effects of Long-Term (Chronic) Exposure:

No chronic health effects expected.

Medical Conditions Aggravated By Exposure: None known.

3. Composition

3.1 Mixture composition

Component	% (w/w)	GHS Classification
Cerium CAS No 7440-45-1 EC No 231-154-9	50 - 55	Flammable Solid, Category 1 Acute Toxicity, Oral, Category 4 Acute Toxicity, Inhalation, Category 4 Acute Toxicity, dermal, Category 4 Skin Irritation, Category 2 Eye Irritation, Category 2A
Lanthanum CAS No 7439-91-0 EC No 231-099-0	25 - 30	Substances and mixtures, which in contact with water, emit flammable gases, Category 1
Iron CAS No 7439-89-6 EC No 231-096-4	15 - 20	Flammable Solid, Category 1 Self-Heating substances and mixtures, Category 1
Non-hazardous ingredients or those below disclosure requirements	None	No GHS classification

4. First Aid Measures

4.1 Description of First Aid Measures

General advice: Solid material has no health hazard. The below advice is for the particles scraped from the striker rod.

In case of eye contact: Immediately flush eyes with water for 10 minutes minimum. While rinsing eyes, hold eyelids open occasionally to more effectively cleanse the eye. Remove contact lenses, if safe to do so. If irritation occurs and persists, consult a doctor immediately.

In case of skin contact: If an irritation occurs or persists seek medical advice.

If inhalation: In the event of inhalation of smoke from the started fire, remove victim to fresh air. If breathing is labored, give artificial respiration or oxygen, if available. Seek medical attention if breathing remains difficult or discomfort occurs.

If ingestion: This product is not orally toxic if ingested. For a conscious person, spit out particles immediately and rinse mouth with water. For an unconscious person, remove chips and pieces by finger. Seek immediate medical attention. Do NOT give anything to an unconscious person. If spontaneous vomiting occurs, have victim lean forward with head between knees to avoid aspirating vomitus. Rinse mouth and give 2 – 4 cups water, if conscious.

4.2 Most important symptoms and effects, both acute and delayed

Effects of Short-Term (Acute) Exposure:

Inhalation: This preparation is used to help start fires. The resulting smoke from burning any organic material may be hazardous to the respiratory tract. Prolonged or repeated inhalation may cause target organ damage (lungs).

Skin Contact: Skin contact with ignited product will cause significant burns.

Eye Contact: Sparks from the striker bar will cause extreme burns if allowed in contact with the eye. Smoke or vapours from the burning product may cause transient eye discomfort.

Ingestion: Accidental ingestion is unlikely due to form of product.

Effects of Long-Term (Chronic) Exposure:

No chronic health effects expected.

Medical Conditions Aggravated By Exposure: None known.

- 4.3 Indication of any immediate medical attention and special treatment needed**
In the case of accidental ingestion, it is important to get treatment immediately.

5. Fire Fighting Measures

5.1 Extinguishing Media

Suitable extinguishing media: Preparation is flammable. When ignited use dry sand, earth or salt. Do not use water, foam, CO₂ or halogenated extinguishers except to extinguish the organic material fire.

- 5.2 Special hazards arising from mixture:** When igniting, ensure care is taken not to burn the skin.

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: Block

HEALTH: 2

FLAMMABILITY: 3

REACTIVITY: 2

PERSONAL PROTECTION: None

HAZARDOUS MATERIALS INFORMATION SYSTEM (HMIS) HAZARD INDEX: Dust and fine particles

HEALTH: 2

FLAMMABILITY: 3

REACTIVITY: 2

PERSONAL PROTECTION: B

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

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. Extinguish all sources of ignition. Shovel into approved containers, properly labeled for disposal. Ensure spilled material is dry and away from water or acids. Avoid friction (rubbing with metallic objects) to prevent sparking which may ignite burnable materials.

Respiratory Protection: To avoid inhaling dust, use N95 or similar respirators.

Skin protection: Wear suitable protective equipment to prevent skin contact.

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

Footwear: No specific recommendation.

Other: None

6.2 Environmental precautions

Water may react with fine particles from the striker if not ignited by striking. This product is unlikely to cause damage to the environment other than causing fire. Ensure that spilled material does not enter sewers or natural waterways.

6.3 Methods and materials for containment and cleanup

Immediately remove all sources of heat/ignition. Clean up spills immediately to protect the environment from fire. Scoop or shovel up material place in an appropriate, properly labelled container for disposal.

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

Large Spills: Not applicable to this preparation.

Small Spills: Scoop or shovel up material place in an appropriate container for disposal, as above.

6.4 Reference to other sections

For disposal, see Section 13.

7. Handling and Storage

7.1 Precautions for safe handling

Handling Procedures: Prevent unnecessary friction! Wash thoroughly and immediately after handling this product and before eating, drinking, smoking or using the toilet.

7.2 Conditions for safe storage, including incompatibilities

Storage: Keep out of reach of children. Keep striker away from friction causing materials, heat, flame, and sources of ignition. Protect from sparks, heat or flame. Store away from incompatible materials such as strong oxidizers.

In bulk storage areas, post "NO SMOKING" signs. Have appropriate fire extinguishers located in an accessible place near storage area. Keep containers closed when not in use.

7.3 Specific end use(s)

No other uses except those mentioned in Section 1.3

8. Exposure Controls, Personal Protection

8.1 Control parameters

Components with workplace control parameters

No ingredient has a known workplace exposure limit listed.

8.2 Exposure Controls

Engineering Controls: The flint striker is designed to be used outdoor. Avoid breathing vapours from product or smoke from the flame, when ignited.

Respiratory Protection: Not applicable for consumers provided package instructions are followed. In circumstances of high concentration of smoke, a NIOSH approved air purifying respirator with N, P or R95 or HE filter and an organic vapour cartridge may be permissible. Approved N95 respirators may be used if dusting occurs.

Skin protection: Appropriate skin protection to prevent contact with sparks.

Eye and Face Protection: Safety glasses to prevent particulate or sparks from entering the eye.

Footwear: No specific recommendation.

Other: None

Control of environmental exposure

None

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance:	Metallic dark grey solid block
Odour:	None
Odour Threshold:	Not applicable
pH:	Not applicable
Melting Point/Freezing Point:	> 600°C
Initial Boiling Point:	> 1000°C
Flash Point:	Not applicable
Evaporation Rate:	Not applicable
Flammability:	Flammable
Upper Explosion Limit:	Not applicable
Lower Explosion Limit:	Not applicable
Vapour Pressure:	Not applicable
Vapour Density:	Not applicable
Relative Density:	~6.7 (water = 1)
Solubility:	Insoluble in water
Partition Coefficient:	Not applicable
Autoignition Temperature:	500°C (Cerium, Lanthanum solid)
Decomposition Temperature:	Not applicable
Viscosity:	Not applicable
Explosive Properties:	Not applicable
Oxidizing Properties:	Not applicable
Percent Volatiles:	Not applicable

9.2 Other safety information: None

10. Stability and Reactivity

10.1 Reactivity

The flint striker, as sold, is stable and non-reactive. Fine material such as dust and fine particles may be reactive with water and may ignite while handling.

10.2 Chemical Stability

Stable under recommended storage conditions. Storage should be in a dry, clean area away from incompatible materials, sources of ignition and heat.

10.3 Possibility of hazardous reactions

Fire when ignited by hot enough ignition source or heat.

10.4 Conditions to avoid

Heat, sparks, flames, sources of ignition which may initiate burning. During fire, irritating and possible toxic gases may be generated by combustion. Keep away from incompatible materials.

10.5 Incompatible materials

Strong oxidizing agents.

10.6 Hazardous decomposition products

None known.

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

No GHS classification

Germ Cell Mutagenicity

No GHS classification

Carcinogenicity

No GHS classification

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 ₅₀	LC ₅₀
Cerium CAS No 7440-45-1	N/av	N/av
Lanthanum CAS No 7439-91-0	N/av	N/av
Iron CAS No 7439-89-6	30000 mg/kg (oral/rat)	N/av

12. Ecological Information

12.1 Toxicity

Aquatic, Acute Aquatic Toxicity, Not classifiable

Aquatic, Chronic Aquatic Toxicity, Not classifiable

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:

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:

Not applicable.

14. Transport Information

Transport of Dangerous Goods (TDG and CLR): UN 3178, FLAMMABLE SOLID, INORGANIC, N.O.S.(Cerium), Class 4.1, PG II

United States Department of Transport (49CFR): UN 3178, FLAMMABLE SOLID, INORGANIC, N.O.S.(Cerium), Class 4.1, PG II

International Air Transport Association (IATA): UN 3178, FLAMMABLE SOLID, INORGANIC, N.O.S.(Cerium), Class 4.1, PG II

International Maritime Organization (IMO): UN 3178, FLAMMABLE SOLID, INORGANIC, N.O.S.(Cerium), Class 4.1, PG II , EmS No F-A, S-G, Stowage Category B

15.Regulatory Information

CANADIAN FEDERAL REGULATIONS:

CEPA, DOMESTIC SUBSTANCES LIST: Listed

AMERICAN FEDERAL REGULATIONS:

TSCA: (Toxic Substance Control Act): Listed

SARA 302 Extremely hazardous substance: *Cerium:* Not regulated
Lanthanum: Not regulated
Iron: Not regulated

SARA 311/312 Hazardous chemical: *Cerium:* Fire Hazard, Acute Health Hazard (powder)
Lanthanum: Reactivity Hazard
Iron: Fire Hazard

SARA 313 (TRI reporting): *Cerium:* Not regulated
Lanthanum: Not regulated
Iron: Not regulated

Other State Regulations:

Massachusetts Right to Know Components:

None

Pennsylvania Right to Know Components:

<i>Cerium</i> (ingots, slabs and rods) CAS No 7440-45-1	Rev Date 2007-03-01
<i>Lanthanum</i> , CAS No 7439-91-0	Rev Date not listed
<i>Iron, powder</i> , CAS No 7439-89-6	Rev Date 1994-07-31

New Jersey Right to Know Components:

<i>Cerium</i> (ingots, slabs and rods) CAS No 7440-45-1	Rev Date 2007-03-01
<i>Lanthanum</i> , CAS No 7439-91-0	Rev Date not listed
<i>Iron, powder</i> , CAS No 7439-89-6	Rev Date 1994-07-31

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: September 1, 2016

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 Fifth 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.

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Revisions: Transport Classification Change, October 18, 2016
Change to Table in Section 3, Toxicity data moved to Section 11