SAFETY DATA SHEET

1. Identification

Product identifier **Abrasive Cut-Off Wheels**

Other means of identification

SDS number 06236

Part Number 808-673, 808-674, 808-675, 810-309-010, 810-310-010, 810-311-010, 810-313-010, 810-314-010, 811-546, 811-980-010, 812-231, 812-232, 833-101-506, 833-101-507, 833-101-508

Recommended use Use in accordance with supplier's recommendations.

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Supplier

Company name LECO Corporation

Address 3000 Lakeview Avenue
St. Joseph, MI 49085
United States

Telephone 269-983-5531

Website www.leco.com

E-mail info@leco.com

Emergency phone number Chemtrec: 800-424-9300
Chemtrec Int'l: 703-527-3887

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Not classified.

Environmental hazards Not classified.

OSHA defined hazards Not classified.

Label elements

Hazard symbol None.

Signal word None.

Hazard statement The mixture does not meet the criteria for classification.

Precautionary statement

Prevention Observe good industrial hygiene practices.

Response Wash hands after handling.

Storage Store away from incompatible materials.

Disposal Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Aluminium oxide		1344-28-1	0 - 95
SILICON CARBIDE		409-21-2	0 - 95
Zirconia Oxide		1314-23-4	0 - 80
Cured Phenolic Resin		N/A	1 - 30
Cured Rubber Compounds		N/A	1 - 20
Iron Pyrite		12068-85-8	0 - 20
Woven Fiberglass		N/A	0 - 15
Sulfur		7704-34-9	0 - 15

Chemical name	Common name and synonyms	CAS number	%
Cryolite		15096-52-3	1 - 10
Cured Epoxy Resin		N/A	1 - 10
MANGANESE CHLORIDE		7773-01-5	1 - 10
Titanium Dioxide		13463-67-7	0 - 5
Calcium Carbonate		1317-65-3	0 - 5
CALCIUM OXIDE		1305-78-8	0 - 5
Potassium Aluminum Fluoride		14484-69-6	0 - 5
Potassium Fluoroborate		14075-53-7	0 - 5
Iron Oxide		1309-37-1	0 - 5
CARBON BLACK		1333-86-4	0 - 5

4. First-aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact Wash off with soap and water. Get medical attention if irritation develops and persists.

Eye contact Rinse with water. Get medical attention if irritation develops and persists.

Ingestion Not likely, due to the form of the product.

Most important symptoms/effects, acute and delayed Dusts may irritate the respiratory tract, skin and eyes.

Indication of immediate medical attention and special treatment needed Treat symptomatically.

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions Use water spray to cool unopened containers.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Ensure adequate ventilation.

Methods and materials for containment and cleaning up Pick up and arrange disposal without creating dust.

Environmental precautions Avoid release to the environment.

7. Handling and storage

Precautions for safe handling Provide adequate ventilation. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid contact with eyes, skin, and clothing. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices. Use care in handling/storage.

Conditions for safe storage, including any incompatibilities Store in tightly closed container. Store in a well-ventilated place.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Aluminium oxide (CAS 1344-28-1)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
Calcium Carbonate (CAS 1317-65-3)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
CALCIUM OXIDE (CAS 1305-78-8)	PEL	5 mg/m3	
CARBON BLACK (CAS 1333-86-4)	PEL	3.5 mg/m3	
Cryolite (CAS 15096-52-3)	PEL	2.5 mg/m3	
Iron Oxide (CAS 1309-37-1)	PEL	10 mg/m3	Fume.
MANGANESE CHLORIDE (CAS 7773-01-5)	Ceiling	5 mg/m3	
SILICON CARBIDE (CAS 409-21-2)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
Titanium Dioxide (CAS 13463-67-7)	PEL	15 mg/m3	Total dust.
Zirconia Oxide (CAS 1314-23-4)	PEL	5 mg/m3	

US. OSHA Table Z-2 (29 CFR 1910.1000)

Components	Type	Value	Form
Cryolite (CAS 15096-52-3)	TWA	2.5 mg/m3	Dust.

US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value	Form
Aluminium oxide (CAS 1344-28-1)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.
Iron Oxide (CAS 1309-37-1)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.
SILICON CARBIDE (CAS 409-21-2)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.
Titanium Dioxide (CAS 13463-67-7)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.
Zirconia Oxide (CAS 1314-23-4)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Aluminium oxide (CAS 1344-28-1)	TWA	1 mg/m3	Respirable fraction.
CALCIUM OXIDE (CAS 1305-78-8)	TWA	2 mg/m3	
CARBON BLACK (CAS 1333-86-4)	TWA	3 mg/m3	Inhalable fraction.
Iron Oxide (CAS 1309-37-1)	TWA	5 mg/m3	Respirable fraction.
MANGANESE CHLORIDE (CAS 7773-01-5)	TWA	0.1 mg/m3	Inhalable fraction.
		0.02 mg/m3	Respirable fraction.
Potassium Fluoroborate (CAS 14075-53-7)	STEL	6 mg/m3	Inhalable fraction.
	TWA	2 mg/m3	Inhalable fraction.
SILICON CARBIDE (CAS 409-21-2)	TWA	0.1 fibers/cm3	Fiber.
		3 mg/m3	Respirable fraction.
		10 mg/m3	Inhalable fraction.
Titanium Dioxide (CAS 13463-67-7)	TWA	10 mg/m3	
Zirconia Oxide (CAS 1314-23-4)	STEL	10 mg/m3	
	TWA	5 mg/m3	

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Calcium Carbonate (CAS 1317-65-3)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
CALCIUM OXIDE (CAS 1305-78-8)	TWA	2 mg/m3	
CARBON BLACK (CAS 1333-86-4)	TWA	0.1 mg/m3	
Cryolite (CAS 15096-52-3)	TWA	2.5 mg/m3	
Iron Oxide (CAS 1309-37-1)	TWA	5 mg/m3	Dust and fume.
MANGANESE CHLORIDE (CAS 7773-01-5)	STEL	3 mg/m3	Fume.
	TWA	1 mg/m3	Fume.
Potassium Fluoroborate (CAS 14075-53-7)	TWA	2.5 mg/m3	
SILICON CARBIDE (CAS 409-21-2)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Zirconia Oxide (CAS 1314-23-4)	STEL	10 mg/m3	
	TWA	5 mg/m3	

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
Cryolite (CAS 15096-52-3)	3 mg/l	Fluoride	Urine	*
	2 mg/l	Fluoride	Urine	*

* - For sampling details, please see the source document.

Appropriate engineering controls Ensure adequate ventilation, especially in confined areas. If material is ground, cut, or used in any operation which may generate dusts, use appropriate local exhaust ventilation to keep exposures below the recommended exposure limits.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection	
Hand protection	Wear appropriate chemical resistant gloves.
Other	Wear suitable protective clothing.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance	
Physical state	Solid.
Form	Solid.
Color	Not available.
Odor	Odorless.
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Not available.
Incompatible materials	Not available.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Dust may irritate respiratory system.
Skin contact	Dust or powder may irritate the skin.
Eye contact	Dust may irritate the eyes.
Ingestion	Not available.

Symptoms related to the physical, chemical and toxicological characteristics Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity

Components	Species	Test Results
CARBON BLACK (CAS 1333-86-4)		
Acute		
Oral		
LD50	Rat	> 8000 mg/kg
Cryolite (CAS 15096-52-3)		
Acute		
Oral		
LD50	Rat	> 5000 mg/kg
MANGANESE CHLORIDE (CAS 7773-01-5)		
Acute		
Oral		
LD50	Rat	250 - 275 mg/kg

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye irritation Direct contact with eyes may cause temporary irritation.

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity

IARC Monographs. Overall Evaluation of Carcinogenicity

CARBON BLACK (CAS 1333-86-4)	2B Possibly carcinogenic to humans.
Cryolite (CAS 15096-52-3)	3 Not classifiable as to carcinogenicity to humans.
Iron Oxide (CAS 1309-37-1)	3 Not classifiable as to carcinogenicity to humans.
SILICON CARBIDE (CAS 409-21-2)	2A Probably carcinogenic to humans.
Titanium Dioxide (CAS 13463-67-7)	2B Possibly carcinogenic to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

CARBON BLACK (CAS 1333-86-4) Known To Be Human Carcinogen.

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

Specific target organ toxicity - single exposure Not classified.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard Not an aspiration hazard.

12. Ecological information

Ecotoxicity

Components		Species	Test Results
Cryolite (CAS 15096-52-3)			
Aquatic			
Acute			
Crustacea	EC50	Water flea (Daphnia pulex)	>= 3.6 - <= 6.8 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	47, 96 hours

Components		Species	Test Results
MANGANESE CHLORIDE (CAS 7773-01-5)			
Aquatic			
Acute			
Crustacea	EC50	Water flea (Daphnia magna)	4.7, 48 hours
Sulfur (CAS 7704-34-9)			
Aquatic			
Acute			
Fish	LC50	Western mosquitofish (Gambusia affinis)	> 10000 mg/l, 96 hours
Titanium Dioxide (CAS 13463-67-7)			
Aquatic			
Acute			
Crustacea	EC50	Water flea (Daphnia magna)	> 1000 mg/l, 48 hours
Fish	LC50	Mummichog (Fundulus heteroclitus)	> 1000 mg/l, 96 hours

Persistence and degradability No data is available on the degradability of any ingredients in the mixture.

Bioaccumulative potential No data available.

Mobility in soil No data available.

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

13. Disposal considerations

Disposal instructions Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Not available.

Contaminated packaging Not available.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

15. Regulatory information

US federal regulations

Toxic Substances Control Act (TSCA)

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

MANGANESE CHLORIDE (CAS 7773-01-5) Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Aluminium oxide	1344-28-1	0 - 95
MANGANESE CHLORIDE	7773-01-5	1 - 10

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

MANGANESE CHLORIDE (CAS 7773-01-5)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Contains component(s) regulated under the Safe Drinking Water Act.

US state regulations

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

CARBON BLACK (CAS 1333-86-4)
Potassium Aluminum Fluoride (CAS 14484-69-6)
Potassium Fluoroborate (CAS 14075-53-7)
SILICON CARBIDE (CAS 409-21-2)
Titanium Dioxide (CAS 13463-67-7)

California Proposition 65

WARNING: This product can expose you to chemicals including Titanium Dioxide, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

California Proposition 65 - CRT: Listed date/Carcinogenic substance

CARBON BLACK (CAS 1333-86-4)	Listed: February 21, 2003
Titanium Dioxide (CAS 13463-67-7)	Listed: September 2, 2011

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Industrial Chemicals (AICIS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 03-08-2016

Revision date 03-29-2022

Version # 04

List of abbreviations AICIS: Australian Inventory of Industrial Chemicals.

Disclaimer

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