* * * Section 1 - PRODUCT AND COMPANY IDENTIFICATION * * *

Material Name: DEADBURNED MAGNESITE

Manufacturer Information

CMC Cometals EMERGENCY
CONTACT:
2050 Center Avenue, Suite 250
Ft. Lee, NJ 07024
Mfg Contact: CMC Cometals

Chemical Family

metal oxides

Synonyms

* * * Section 2 - HAZARDS IDENTIFICATION * * *

POTENTIAL HEALTH EFFECTS

Inhalation

Short Term: irritation, metallic taste, metal fume fever
Long Term: irritation

Skin

Short Term: mild irritation
Long Term: irritation

Eye

Short Term: mild irritation
Long Term: irritation

Ingestion

Short Term: diarrhea, symptoms of drunkenness
Long Term: no information is available

* * * Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS * * *

CAS	Component	Percent	Symbol(s)	Risk Phrase(s)
1309-48-4	DEADBURNED MAGNESITE 215-171-9	100.0	---	---

Component Related Regulatory Information

This product may be regulated, have exposure limits or other information identified as the following: magnesium inorganic compounds.

* * * Section 4 - FIRST AID MEASURES * * *

Inhalation

If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. Get immediate medical attention.

Skin

Wash skin with soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention, if needed. Thoroughly clean and dry contaminated clothing and shoes before reuse.

Eyes

Flush eyes with plenty of water for at least 15 minutes. Then get immediate medical attention.

Ingestion

If a large amount is swallowed, get medical attention.

* * * Section 5 - FIRE FIGHTING MEASURES * * *

See Section 9 for Flammability Properties

NFPA Ratings: Health: 1 **Fire:** 0 **Reactivity:** 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

Flammable Properties

Negligible fire hazard.

Extinguishing Media

Use extinguishing agents appropriate for surrounding fire.

Fire Fighting Measures

Move container from fire area if it can be done without risk. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas.

* * * Section 6 - ACCIDENTAL RELEASE MEASURES * * *

Occupational spill/release

Absorb with sand or other non-combustible material. Collect spilled material in appropriate container for disposal.

* * * Section 7 - HANDLING AND STORAGE * * *

Storage Procedures

Store and handle in accordance with all current regulations and standards. Keep separated from incompatible substances.

* * * Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION * * *

Component Exposure Limits

DEADBURNED MAGNESITE (1309-48-4)

ACGIH: 10 mg/m3 TWA (inhalable fraction)
NIOSH: 750 mg/m3 IDLH (fume)
OSHA (US): 15 mg/m3 TWA (fume, total particulate)
Mexico: 10 mg/m3 TWA (as Mg, fume)

IDLH

750 mg/m3

Ventilation

Provide local exhaust ventilation system. Ensure compliance with applicable exposure limits.

PERSONAL PROTECTIVE EQUIPMENT

Eyes/Face

Wear splash resistant safety goggles. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

Protective Clothing

Wear appropriate chemical resistant clothing.

Glove Recommendations

Wear appropriate chemical resistant gloves.

Respiratory Protection

The following respirators and maximum use concentrations are drawn from NIOSH and/or OSHA.
150 mg/m3
Any particulate respirator equipped with an N95, R95, or P95 filter (including N95, R95, and P95 filtering facepieces) except quarter-mask respirators. The following filters may also be used: N99, R99, P99, N100, R100 or P100.
Any supplied-air respirator.
375 mg/m3
Any supplied-air respirator operated in a continuous-flow mode.
Any powered, air-purifying respirator with a high-efficiency particulate filter.
750 mg/m3
Any air-purifying, full-facepiece respirator equipped with an N100, R100, or P100 filter.
Any powered, air-purifying respirator with a tight-fitting facepiece and a high-efficiency particulate filter.
Any self-contained breathing apparatus with a full facepiece.
Any supplied-air respirator with a full facepiece.
Emergency or planned entry into unknown concentrations or IDLH conditions -
Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode.
Any supplied-air respirator with a full facepiece that is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained breathing apparatus operated in pressure-demand or other positive-pressure mode.
Escape -
Any air-purifying, full-facepiece respirator equipped with an N100, R100, or P100 filter.
Any appropriate escape-type, self-contained breathing apparatus.

* * * Section 9 - PHYSICAL AND CHEMICAL PROPERTIES * * *

Physical State:	Solid	**Appearance:**	Not available
Physical Form:		**Odor:**	Not Available
Odor Threshold:	Not available	**pH:**	10.3
pH (solution):	saturated solution	**Melting Point:**	2852 °C
Boiling Point:	3600 °C	**Vapor Pressure:**	Not applicable
Vapor Density (air = 1):	Not applicable	**Density:**	Not available
Specific Gravity (water = 1):	3.58 @ 25 °C	**Water Solubility:**	slightly soluble
Coeff. Water/Oil Dist:	Not available	**Molecular Weight:**	40.31
Molecular Formula:	MG-O		

Solvent Solubility

Soluble: dilute acids, ammonium salt solutions
Insoluble: alcohol

* * * Section 10 - STABILITY AND REACTIVITY * * *

Chemical Stability

Stable at normal temperatures and pressure.

Conditions to Avoid

None reported.

Materials to Avoid

acids, metals, halogens, combustible materials
MAGNESIUM OXIDE:
ACIDS (STRONG): Violent reaction.
ALKALIS (STRONG): May attack.
ALUMINUM POWDER: May ignite or explode when heated.
BROMINE PENTAFLUORIDE: Violent reaction.
CHLORINE TRIFLUORIDE: May ignite.
INTERHALOGENS: Incompatible.
MAGNESIUM POWDER: May ignite or explode when heated.
PHOSPHORUS PENTACHLORIDE: Incandesces brilliantly on heating.
SULFUR (SUBLIMED): May ignite or explode when heated.

Decomposition Products

miscellaneous decomposition products
Thermal decomposition products: miscellaneous decomposition products.

Possibility of Hazardous Reactions

Will not polymerize.

* * * Section 11 - TOXICOLOGICAL INFORMATION * * *

Component Analysis - LD50/LC50

The components of this material have been reviewed in various sources and no selected endpoints have been identified.

RTECS Acute Toxicity (selected)

The components of this material have been reviewed and RTECS publishes no data as of the date on this document.

Component Carcinogenicity

DEADBURNED MAGNESITE (1309-48-4)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

RTECS Irritation

The components of this material have been reviewed and RTECS publishes no data as of the date on this document.

Medical Conditions Aggravated by Exposure

respiratory disorders

RTECS Tumorigenic

The components of this material have been reviewed, and RTECS publishes the following endpoints:
DEADBURNED MAGNESITE (1309-48-4)
480 mg/kg intratracheal hamster TDLo (30 week(s))

Additional Data

Interactions with drugs may occur.

HEALTH EFFECTS

Inhalation - Acute Exposure

MAGNESIUM OXIDE: The dust may cause respiratory tract irritation. Metal fume fever, an influenza-like illness, may occur if freshly formed magnesium oxide fumes composed of particles sized between 0.02-0.05 microns are inhaled in sufficient amounts. Symptoms may be delayed 4-12 hours and begin with a sudden onset of thirst, and a sweet, metallic or foul taste in the mouth. Other symptoms may include upper respiratory tract irritation accompanied by coughing and a dryness of the mucous membranes, lassitude and a generalized feeling of malaise. Fever, chills, muscular pain, mild to severe headache, nausea, occasional vomiting, exaggerated mental activity, profuse sweating, excessive urination, diarrhea, prostration and leukocytosis may also occur. Tolerance to fumes develops rapidly, but is quickly lost. All symptoms usually subside within 24-36 hours.

Inhalation - Chronic Exposure

MAGNESIUM OXIDE: May cause respiratory tract irritation, nasal catarrh, and coughing up of discolored sputum. Dusts may cause chronic bronchitis, emphysema, and bronchial asthma.

Skin Contact - Acute Exposure

MAGNESIUM OXIDE: Particulates may cause slight irritation.

Skin Contact - Chronic Exposure

MAGNESIUM OXIDE: May cause eczema, edema, or hives.

Eye Contact - Acute Exposure

MAGNESIUM OXIDE: May cause slight irritation, redness, and pain. Abrasive action of dust can damage eyes.

Eye Contact - Chronic Exposure

MAGNESIUM OXIDE: Repeated or prolonged exposure may cause conjunctivitis.

Ingestion - Acute Exposure

MAGNESIUM OXIDE: Magnesium salts are generally so slowly absorbed that oral administration causes nothing more than purging. If evacuation fails, mucosal irritation and absorption may occur. If ingested in sufficient quantities, may cause gastrointestinal disturbances. Symptoms may include irritation, nausea, vomiting, abdominal pain, and diarrhea. Systemically, magnesium may produce central nervous system depression, abolition of reflexes, and death from respiratory paralysis.

Ingestion - Chronic Exposure

MAGNESIUM OXIDE: No data available.

* * * Section 12 - ECOLOGICAL INFORMATION * * *

Component Analysis - Aquatic Toxicity

No LOLI ecotoxicity data are available for this product's components.

* * * Section 13 - DISPOSAL CONSIDERATIONS * * *

Disposal Methods

Dispose in accordance with all applicable regulations.

Component Waste Numbers

The U.S. EPA has not published waste numbers for this product's components.

* * * Section 14 - TRANSPORT INFORMATION * * *

US DOT Information

No Classification assigned.

TDG Information

No Classification assigned.

ADR Information

No Classification assigned.

RID Information

No Classification assigned.

IATA Information

No Classification assigned.

ICAO Information

No Classification assigned.

IMDG Information

No Classification assigned.

* * * Section 15 - REGULATORY INFORMATION * * *

U.S. Federal Regulations

None of this products components are listed under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 311/312 (40 CFR 370.21), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), or require an OSHA process safety plan.

SARA Section 311/312 (40 CFR 370 Subparts B and C)

Acute Health: No **Chronic Health:** No **Fire:** No **Pressure:** No **Reactive:** No

U.S. State Regulations

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA	RI
DEADBURNED MAGNESITE	1309-48-4	Yes	Yes	Yes	Yes	Yes	Yes

Not regulated under California Proposition 65

Canada

Canada WHMIS

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

DEADBURNED MAGNESITE (1309-48-4)

1 %

Germany Water Classification

DEADBURNED MAGNESITE (1309-48-4)

Number 5208, hazard class 1 - low hazard to waters

Component Analysis - Inventory

Component	CAS	US	CA	EU	AU	PH	JP	KR	CN	NZ
DEADBURNED MAGNESITE	1309-48-4	Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	Yes

* * * Section 16 - OTHER INFORMATION * * *

Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; LOLI - List Of LIsts™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; RID - European Rail Transport; RTECS - Registry of Toxic Effects of Chemical Substances®; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States

Other Information

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