DKD

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Rules and Regulations

Version 3.0

Date of issue: 11/20/2013 Revision date: 04/29/2026 Supersedes: 05/22/2015

SECTION 1: Identification

1.1 GHS Product identifier

Product Form:	Mixture
Product name:	DKD
Substance name:	Calcium Magnesium Oxide/Dolomitic Limestone
CAS no:	37247-91-9/16389-88-1
EC no.:	253-425-0/240-440-2

1.2 Other means of identification

Dolomitic Kiln Dust

1.3 Recommended use of the chemical and restrictions on use

Dolomitic kiln dust is primarily used in structural stabilization projects, waste remediation, and other applications.

1.4 Supplier's details

Name	Martin Marietta
Address	2700 Wycliff Road Suite 320 Raleigh NC 27607 USA
Telephone	(800) 648 - 7400

1.5 Emergency phone number

Available 24/7: U.S., CHEMTREC: 1-800-424-9300

Available 24/7: International, CHEMTREC: +1-703-527-3887

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

GHS classification in accordance with: OSHA (29 CFR 1910.1200, 2024)

- Skin corrosion/irritation (C.4.4), Cat. 2
- Eye damage/irritation (C.4.5), Cat. 1
- Specific target organ toxicity (single exposure) (C.4.11), Cat. 3

2.2 GHS label elements, including precautionary statements

Pictograms

1. Exclamation mark; 2. Corrosion

Signal word **Danger**

Hazard statement(s):

H315 – Causes skin irritation.
H318 – Causes serious eye damage.
H335 – May cause respiratory irritation.

Precautionary statement(s):

P261 – Avoid breathing dust.
P264 – Wash hands thoroughly after handling.
P271 – Use only outdoors or in a well-ventilated area.
P280 – Wear eye protection, protective gloves.
P302 +P352 – IF ON SKIN: Wash with plenty of soap and water.
P304 + P340 – IF INHALED: Remove to fresh air and keep at rest in a

position comfortable for breathing.
P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 – Immediately call a POSIN CENTER or doctor/physician.
P312 – Call a POISON CENTER/doctor/physician if you fell unwell.
P332 + P313 – If skin irritation occurs: Get medical advice/attention.
P362 – Take off contaminated clothing and wash before reuse.
P403 + P233 – Store in a well-ventilated place. Keep container tightly closed.
P501 – Dispose of contents/container to an approved waste disposal plant.

2.3 Other hazards which do not result in classification

Reacts with water, releasing heat which can ignite combustible products.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Component	Identification	Weight %	Classification (GHS-US)
Calcium magnesium oxide	CAS no.: 37247-91-9 EC no.: 253-425-0	20 - 60 %	- Skin corrosion/irritation (C.4.4), Cat. 2 - Eye damage/irritation (C.4.5), Cat. 1 - Specific target organ toxicity (single exposure) (C.4.11), Cat. 3
Dolomitic limestone	CAS no.: 16389-88-1 EC no.: 240-440-2	20 - 60 %	Not classified
Inorganic compounds containing sulfur	Mixture	8 - 12 %	Not classified
Inorganic carbonate	Mixture	4.5 %	Not classified

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

General advice: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

If inhaled: If inhaled and if breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

In case of skin contact: Not expected to be an irritant. Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

In case of eye contact: Rinse immediately with plenty of water. Obtain medical attention if pain, blinking, or redness persists.

4.2 Most important symptoms/effects, acute and delayed

Symptoms/effects after inhalation: Inhalation may cause irritation, cough, shortness of breath.

Symptoms/effects after skin contact: None under normal conditions.

Symptoms/effects after eye contact: May cause eye irritation.

4.3 Indication of immediate medical attention and special treatment needed, if necessary

All treatments should be based on observed signs and symptoms of distress in the patient.

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media

Suitable extinguishing media:	Not combustible. Use suitable extinguishing agents: carbon dioxide, dry powder, foam.
Unsuitable extinguishing media:	Do not use extinguishing media containing water.

5.2 Specific hazards arising from the chemical

Fire hazard:	No particular fire or explosion hazard
Explosive hazard:	Product is not explosive.
Reactivity:	Reacts with: Incompatible materials: acids; water. See Section 7.

5.3 Special protective actions for fire-fighters

Firefighting instructions:	Use suitable extinguishing media. Exercise caution when fighting any chemical fire. Do not allow run-off from firefighting to enter drains or water sources.
Protection during firefighting:	Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

General measures:	Avoid creating or spreading dust.
For non-emergency personnel:	Avoid contact with skin and eyes. Evacuate unnecessary personnel.
For emergency personnel:	Avoid contact with skin and eyes.

6.3 Methods and materials for containment and cleaning up

Large spills:	Scoop solid spill into closing containers. Minimize generation of dust.

Reference to other sections

See Section 7: Safe Handling
See Section 8: Personal Protection Equipment
See Section 13: Disposal Information

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Hygiene measures:	Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking, and when leaving work

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions:	Keep container tightly closed and in a well ventilated place. Protect from moisture and incompatible materials.
Incompatible products:	Strong acids. Water

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

CAS: 37247-91-9 (EC: 253-425-0)
Calcium magnesium oxide
ACGIH: 10 mg/m^3 Total Dust TWA air;
US/OSHA: 15 mg/m^3 Total Dust PEL-TWA air;
5 mg/m^3 Respirable Fraction PEL-TWA inhalation

CAS: 16389-88-1 (EC: 240-440-2)
Dolomitic limestone
ACGIH: 10 mg/m^3 Total Dust TWA air;
US/OSHA: 15 mg/m^3 Total Dust PEL-TWA air;
5 mg/m^3 Respirable Fraction PEL-TWA inhalation

8.2 Appropriate engineering controls

Provide local exhaust or general room ventilation to minimize exposure to dust. Use engineering controls to eliminate or reduce exposure below exposure limits. Protect from moisture.

8.3 Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

In case of dust production: protective goggles.

Skin protection

Gloves. PVC; neoprene; natural rubber.

Respiratory protection

Where excessive dust may result, use approved respiratory protection equipment. Use an N95 respirator.

SECTION 9: Physical and chemical properties

Basic physical and chemical properties

Physical state	Solid
Appearance, such as physical state and color	Powder to granules.
Color	Gray to white.
Odor	Odorless
Odor threshold	Not applicable
Melting point and freezing point	No data available
Boiling point or initial boiling point and boiling range	No data available
Flammability	Not applicable
Lower and upper explosion limit or lower and upper flammability limit	No data available
Flash point	Not applicable
Explosive properties	Product is not explosive.
Auto-ignition temperature	Not applicable
Decomposition temperature	No data available
Oxidizing properties	No oxidizing properties
pH	Not applicable
Kinematic viscosity	Not applicable
Solubility	Soluble in water;
Partition coefficient — n-octanol/water (logarithmic value)	No data available
Vapor pressure	Not applicable
Evaporation rate	Not applicable
Density and relative density	0.72 - 0.90 g/cm3
Relative vapor density	Not applicable

Additional properties

Physical state	Solid

Color	Gray to white.
Explosive properties	Product is not explosive.

Further safety characteristics (supplemental)

VOC content: 0%

SECTION 10: Stability and reactivity

10.1 Reactivity

Reacts with: Incompatible materials: strong acids and water.

10.2 Chemical stability

Stable at ambient temperature and under normal conditions of use.

10.3 Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4 Conditions to avoid

Contact with incompatible materials. Moisture.

10.5 Incompatible materials

Strong acids.

Water

10.6 Hazardous decomposition products

No additional information available.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity: Not classified (Based on available data, the classification criteria are not met)

Calcium magnesium oxide (CAS No 37247-91-9) LD50 oral (rat): >20000 mg/kg

Skin corrosion/irritation: Causes skin irritation.

Serious eye damage/irritation: Causes serious eye damage.

Respiratory or skin sensitization: Not classified (Based on available data, the classification criteria are not met)

Germ cell mutagenicity: Not classified (Based on available data, the classification criteria are not met)

Carcinogenicity: Not classified (Based on available data, the classification criteria are not met)

Reproductive toxicity: Not classified (Based on available data, the classification criteria are not met)

Aspiration hazard: Not classified (Based on available data, the classification criteria are not met)

Specific target organ toxicity (STOT)

STOT - single exposure: May cause respiratory irritation.

STOT - repeated exposure: Not classified (Based on available data, the classification criteria are not met)

Additional information

Likely routes of exposure: Dermal; Inhalation

Symptoms/effects:	Irritation: may cause irritation to the respiratory system. May cause serious damage to eyes. Causes skin irritation.
Symptoms after inhalation:	Inhalation may cause irritation, cough, shortness of breath.
Symptoms after skin contact:	Dermal contact may cause irritation.
Symptoms after eye contact:	Causes serious eye damage.

SECTION 12: Ecological information

Toxicity

No data available.

Persistence and degradability

Not readily biodegradable.

Bioaccumulative potential

This product is not bioaccumulating.

Mobility in soil

No additional information available.

Other adverse effects

No additional information available.

SECTION 13: Disposal considerations

Disposal Methods

Waste disposal recommendations: Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

DOT (US)

Not dangerous good.

IMDG

Not dangerous good.

IATA

Not dangerous good.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

Calcium Magnesium Oxide (CAS No: 37247-91-9)

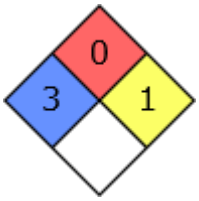
Jurisdiction	List	Comment
Australia	Australian Inventory of Chemical Substances (AICS)	Listed
China	Inventory of Existing Chemical Substances (IECSC)	Listed
Japan	Existing and New Chemical Substances (ENCS)	# 1-465; inorganic compounds

Korea	Chemical Inventory Korea (KECI)	KE-04576
New Zealand	Inventory of Chemicals (NZIoC)	Listed
Philippines	Inventory of Chemicals and Chemical Substances (PICCS)	Listed
Europe	EU Inventory of Existing Commercial Chemical Substances (EINECS)	253-425-0
Canada	Canadian Domesticated Substances List (NDSL)	Listed
United States	Toxic Substances Control Act (TSCA) Inventory	Listed

Dolomitic Limestone (CAS No: 16389-88-1)

Jurisdiction	List	Comment
Australia	Australian Inventory of Chemical Substances (AICS)	Listed
China	Inventory of Existing Chemical Substances (IECSC)	Listed
Japan	Existing and New Chemical Substances (ENCS)	# 1-465; inorganic compounds
Korea	Chemical Inventory Korea (KECI)	KE-13036
New Zealand	Inventory of Chemicals (NZIoC)	Listed
Philippines	Inventory of Chemicals and Chemical Substances (PICCS)	Listed
Europe	EU Inventory of Existing Commercial Chemical Substances (EINECS)	253-425-0
Canada	Canadian Domesticated Substances List (NDSL)	Listed
United States	Toxic Substances Control Act (TSCA) Inventory	Listed

NFPA Rating



NFPA health hazard: 3 – Short exposure could cause serious temporary or residual injury even though prompt medical attention was given.

NFPA fire hazard 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.

NFPA reactivity 1 – Normally stable, but can become unstable at elevated temperatures and pressures or may react with water with some release of energy but not violently.

SECTION 16: Other information

according to Federal Register / Vol. 89, No. 98/ Tuesday, May 20, 2024 / Rules and Regulations

Revision date: 04/29/2026

Data sources:

ACGIH 2000
Chemical Inspection & Regulation Service; accessed at http://www.cirs-reach.com/Inventory/Global_Chemicalical_Inventories.html.
Ind. Exposure & Control Techn. for OSHA Regulated Substances - MgO (fume) March, 1969, pp. 1181 - 1184.
Krister Forsberg and S. Z. Mansdorf, "Quick Selection Guide to Chemical Protective Clothing", Fifth Edition.
NIOSH Occupational Health Guide for Chemical Substances - Vol. II September 1978.
Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on the classification, labelling, and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC and amending Regulation (EC) No 1907/2006.
TRECS, June 1998
Sax - 8th ED. TSCA Chemical Substance Inventory. Accessed at http://www.epa.gov/oppt/existingchemicals/pubs/tscainventory/howto.html.
US National Library of Medicine National Institutes of Health Haz-Map. Accessed at http://hazmap.nlm.nih.gov.

Abbreviations and acronyms:

ACGIH: American Conference of Government Industrial Hygienists
ATE: Acute Toxicity Estimate
CAS: Chemical Abstract Service number
EC50: Environmental Concentration associated with a response by 50% of the test population.
GHS: Globally Harmonized System
LD50: Lethal Dose for 50% of test population.
OSHA: Occupational Safety & Health Administration
TSCA: Toxic Substances Control Act
TWA: Time Weighted Average

16.1 Further information/disclaimer

Disclaimer: The information contained in this document applies to this specific material as supplied and Martin Marietta believes that the information contained in this SDS is accurate. The suggested precautions and recommendations are based on recognized good work practices and experience as of the date of publication. They are not necessarily all-inclusive or fully adequate in every circumstance as not all use circumstances can be anticipated. It may not be valid for this material if it is used in combination with other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for one's own particular use. Since the actual use of the product described herein is beyond our control, Martin Marietta assumes no liability arising out of the use of the product by others. Appropriate warnings and safe handling procedures should be provided to handlers and users. Also, the suggestions should not be confused with nor followed in violation of applicable laws, regulation, rules or insurance requirement. However, products must not be used in a manner which could result in harm.

16.2 Preparation information

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