

SAFETY INFORMATION SHEET



MAGNESIUM OXIDE

Date : 25/04/2017
Revision : 2

The information given below corresponds with our knowledge and experience of our product and is not exhaustive. It applies to product that is within specification barring any specified exclusions. In the case of blending or mixing with other products, make certain first that this will not be dangerous.

TIMAB USA, INC. 901 North Third Street, Suite 218 Minneapolis, 55401 - USA T 612-638-2159 timab@timabusa.com - www.timab.com	This product is not legally subject to the provision of a Safety Data Sheet according to OSHA's Hazard Communication Standard (HAZCOM – 29 CFR 1910.1200) and this safety information sheet is provided on a voluntary basis.
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1 Identification of the substance / preparation

1.1 Name of product	Magnesium Oxide
1.2 Chemical name	Magnesium oxide
1.3 Emergency telephone number :	Your national toxic substance emergency call centre

2 Identification of danger

Inhalation	May cause nasal and pulmonary irritation (in case of high level of dust) Possibility of suffocation
Eyes	May cause irritation due to particles May cause irritation, weeping and reddening due to basic characteristic of product
Skin	May cause Irritation due to prolonged and repeated contact with product
Ingestion	May cause illness (rapid elimination via urine)

3 Composition / Informations on the components

3.1 Components or impurities involving a danger.	Not classified as dangerous according to Council Directive 67/548/EEC Not classified as dangerous according to Council Directive 1272/2008/EC Not classified as dangerous according to according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations- 29 CFR 1910.1200
3.2 Molecular weight	40.31 g/mol
3.3 N° CAS	1309-48-4
3.4 N° EINECS	215-171-9

4 First aid

4.1 First aid	
Inhalation	If symptoms of exposure are experienced remove victim to fresh air. Obtain medical attention.
Contact with eyes	Rinse eyes with running water keeping eyelids open (use eye bath) Consult ophthalmologist in case of persistent irritation
Contact with skin	Not expected to cause a problem. However, if irritation occurs, flush affected area with water. If irritation Persists, obtain medical attention.
Ingestion	Rinse out mouth well. Drink fresh water
4.3 General recommendations	Do not hesitate to inform a doctor
4.4 Medical annexe	None

5 Fire fighting methods

5.1 Appropriate extinguishing methods	All extinguishing methods are applicable (first choice is water spray)
5.2 Inappropriate extinguishing methods	None
5.3 Particular risks	Non flammable
5.4 Protective measures in case of intervention	Use extinguishing media most appropriate for the surrounding fire Firefighters should wear protective clothing and self-contained breathing apparatus
5.5 Other protections	Remove all receivers exposed to fire, otherwise refresh them with sprayed water

6 Measures to be taken in case of accidental spillage

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6.1 Individual and collectives measures	Prevent public access prior to cleaning Wear protective clothing Ventilate if in enclosed area
6.2 Cleaning methods	Collect product mechanically Place residue in a clean and labelled receptable Clean with water Avoid sweeping to reduce dust
6.3 Precautions for environment protection	Presents no particular risk Do not spill in an environmentally sensitive area (rivers or soil)

7 Handling and storage	
7.1 Handling	Avoid inhalation of dust. Clean area frequently to avoid dust build-up. Wear applicable personal protective equipment as indicated in Section 8 – Exposure Controls and Personal Protection
7.2 Storage	Store in a dry area in sealed containers. Keep away from incompatible materials such as interhalogens and strong acids. Avoid contact with water - product reacts exothermically with water to form magnesium hydroxide and heat/steam. Water contact in closed or restricted storage vessels may cause heat, swelling, and possible rupture of storage vessel.
7.3 Packaging storage	Bulk : Revetted steel Sacks : paper, polythene
7.4 Other precautions	Avoid storage with strong acids and halogenes

8 Exposure control / Individual protection	
8.1 Technical measures	Engineering controls may include process enclosure and/or local exhaust ventilation to maintain dust concentrations below allowable exposure limits. Local exhaust ventilation with or without process enclosure is important where large quantities are handled, as in bagging operations.
8.2 Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment.;Use air-purifying respirator equiped with particulate filtering cartridges.
8.3 Hand protection	Wear protective gloves: dust impervious gloves.
8.4 Eye protection	Wear safety goggles in high dust concentrations, unless full face-piece respiratory protection is worn.
8.5 Skin protection	Wear coveralls. Do not put on heavily soiled clothing.
8.6 Other protections	No data available

9 Physical and chimical properties	
2.4 Formula	MgO
9.1 Aspect	White to light brown powder/granules
9.2 Odor	Non odorous
9.3 pH	10.5
9.4 Point / Boiling interval (1013mbar)	3 600°C
9.5 Point / Melting interval	2 800°C
9.6 Flash point	Non applicable
9.7 Flammability	Non applicable
9.8 Auto-combustion	Non applicable
9.9 Explosion danger	None
9.10 Oxiding properties	None
9.11 Vapour pressure	Zero
9.12 Relative density	0.9-1.1

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9.13 Solubility	Soluble in diluted acid and in an ammonium salt solution Lightly soluble in water : 0.0006 g/100 ml No soluble in alcohol
9.14 Viscosity	Non applicable
9.15 Decomposition temperature	Non applicable
9.16 Splitting coefficient (P n-octanol/water)	Non applicable
9.17 Other data	None

10 Stability et reactivity	
10.1 Stability	Stable under normal condition.
10.2 Conditions to be avoided	None
10.3 Materials to be avoided	Avoid contact with: water (reacts exothermically with water to form magnesium hydroxide), strong acids (reacts exothermically), interhalogens such as bromine trifluoride, bromine pentafluoride, bromine trichloride, chlorine trifluoride (violent reaction or ignition) and phosphorous pentachloride (incandescent reaction).
10.4 Dangerous decomposition products	Magnesium fume may be generated if heated to volatilisation. Heat and Steam may be generated upon contact with water.
10.5 Other informations	None

11 Toxicological information	
11.1 Acute toxicity	This substance is not classified in the Annex I of Directive 67/548/EEC or in the Annex VI of Regulation 1272/2008 and not listed in a priority list under EEC Council Regulation 793/93.
DL ₅₀ , oral	highest published: 3870-3990 mg/kg; rodent(rat). lowest published: 810 mg/kg; rodent(mice).
DL ₅₀ , dermal	Non available
DL ₅₀ , inhalation	Non available
Irritation	None
Sensitization	None
11.2 Chronic toxicity	Prolonged and repeated contacts may cause irritations
11.3 Cumulative effect	None

12 Ecological information	
12.1 Acute toxicity	
CL ₅₀ , fishes	Non available
CE ₅₀ , seaweeds	Non available
CL ₅₀ , daphnia	Non available
12.2 Environmental behaviour	
Mobility	Non available
Persistence	Non available
Degradation	Non available
Potential and bioaccumulation	Non available
12.3 Valuation	None

13 Considerations related to elimination	
13.1 Waste treatment	Take all necessary measures to avoid accidental discharge of products into drains and waterways due to the rupture of containers or transfer systems. Dispose in a safe manner in accordance with local/national regulations.

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13.2 Packaging treatment	Empty sacks well Rinse and treat effluent like product All waste packaging can be recycled at an authorised point
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14 Information in relation with transport

14.1 N° ONU	None
14.2 Classification	ADR/ RID/ ADNR : product not classified IMDG : product not classified OACI/ IATA : product not classified

15 Regulation information

15.1 EC regulation	This substance has been exempted from registration obligations under REACH (Regulation EC No. 1907/2006), due to its inclusion in Annex V (Annex II, paragraph 10 of Commission Regulation No. 987/2008 amending REACH as regards Annexes IV and V). No Chemical Safety Assessment obligations arise for this substance. This substance is not listed in Annex I of Regulation (EC) No. 689/2008 concerning the Export and Import of Dangerous Chemicals. This substance is not classified as hazardous in the Annex I of Directive 67/548/EEC or in the Annex VI of Regulation 1272/2008.
15.2 Authorized limits	
VME/TLV (ACGIH)	TWA= 10 mg/ m ³
Others	PEL-TWA = 10 mg/m ³ PEL-TWA = 15 mg/m ³
15.3 Other regulations	Magnesium Oxide is reported on the following national inventory and/or regulatory lists: Europe - European Inventory Of Existing Commercial Chemical Substances (EINECS): 215-171-9 Australia - Australian Inventory Of Chemical Substances (AICS): 1309-48-4 Canada - Domestic Substance List (DSL): 1309-48-4 Japan - Existing And New Chemical Substances (ENCS): 1-465 Korea - Existing And Evaluated Chemical Substances (KECL): KE-22728 USA - Toxic Substance Control Act (TSCA) Inventory List 8(b): 1309-48-4

16 Other information

This safety information sheet is provided on a voluntary basis.