



**MATERIAL SAFETY DATA SHEET
(Conforms to CFR 1910.1200)**

1 IDENTIFICATION OF SUBSTANCE

TRADE NAME: MAGNESOL®

GRADES: XL

SUPPLIER: The Dallas Group of America, Inc.
 374 Route 22
 P.O. Box 489
 Whitehouse, NJ 08888 Tel: 908-534-7800 FAX: 908-534-0084

Information department: Product Safety Department

2 COMPOSITION/DATA ON INGREDIENTS

CAS No.	Description	% Min.
1343-88-0	Magnesium Silicate	97

3 HAZARDS IDENTIFICATION

MAGNESOL® products are not explosive, flammable, or combustible.

Mild irritant to eyes, skin, and respiratory system.

HMIS ratings (scale 0-4)

0 Health	Health = 0
0 Fire	Fire = 0
0 Reactivity	Reactivity = 0

4 FIRST AID MEASURES

Inhalation: Drink water to clear the throat, blow nose to clear respiratory passages.

Ingestion: Incidental ingestion of this product does not require first aid.

Skin Contact: Wash exposed area thoroughly with soap and water.

Eye Contact: Flush eyes with plenty of water. Call a physician if irritation persists.

5 FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Select the proper media to extinguish a surrounding fire.

6 ACCIDENTAL RELEASE MEASURES

SPILL CLEANUP METHODS: Sweep or vacuum spilled material; the use of a sweeping compound/dust suppressant is suggested. Make sure that all personnel involved in housekeeping and spill clean-up follow good industrial hygiene practices and wear proper personal protective equipment.

7 HANDLING AND STORAGE

USAGE PRECAUTIONS: None in designated use.
 STORAGE PRECAUTIONS: None in designated use.
 STORAGE CRITERIA: No special requirements.

8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

American Conference of Government Industrial Hygienists (ACGIH) - The 1998-99 issue does not list magnesium silicate in the substance index. A threshold limit value - time weighted average (TLV-TWA) of 10 mg/m³ of total dust is recommended for substances for which no specific TLVs have been assigned.

PROTECTIVE EQUIPMENT:

VENTILATION: No special requirements.

RESPIRATORS: If the airborne concentration exceeds the ACGIH recommended TLV, an approved dust mask should be worn.

PROTECTIVE GLOVES: Not required.

EYE PROTECTION: Not required.

OTHER PROTECTION: Not required.

HYGEINIC WORK ROUTINES: No special requirements.

9 PHYSICAL AND CHEMICAL PROPERTIES

Normal Physical State @ 20° C (68° F):	White, odorless powder
pH (1 in 10 slurry)	7.0 to 10.8
Melting Point:	1910° C (3470° F)
Absolute Density (H ₂ O = 1)	2.10 – 2.20
Solubility in Water:	Insoluble
Vapor Pressure:	N/A*
Viscosity:	N/A*
Boiling Point:	N/A*
Vapor Density:	N/A*
% Volatile:	N/A*
Evaporation Rate:	N/A*
Ignition Temperature:	N/A*
*N/A - Not applicable	

10 STABILITY AND REACTIVITY

Stability: Stable
 Polymerization: Will not and cannot occur

Conditions and Materials to Avoid - None in designated use. In sufficient quantity, a filter cake composed of a flammable organic liquid absorbed on MAGNESOL® or other filter materials such as diatomaceous earth, perlite, or natural clays may be pyrophoric.

11 TOXICOLOGICAL INFORMATION

Hill Top Biolabs, Inc.
Cincinnati, OH, 1989.

- a) Albino male rat: Acute oral - LD50 > 5.0 g/kg
- b) Albino rabbit: Acute dermal - LD50 > 2.0 g/kg
Primary Irritation Index 0.80
0 = No erythema (skin redness)
1 = Very slight erythema
- c) Albino rabbit: Eyes-Mild irritation and conjunctivitis.

The above study was specific to MAGNESOL® with the formula MgO:2.6SiO₂•H₂O. The conclusions of this test were:

- A. MAGNESOL® is classified as non-toxic by oral administration.
- B. It is not a primary skin irritant or a corrosive by dermal application.
- C. It is not classified as toxic by dermal administration.
- D. It is classified in Toxicity Category III by ocular administration.

This product does not contain any ingredient designated by IARC, NTP, ACGIH, or OSHA as probable or suspected human carcinogens.

12 ECOLOGICAL INFORMATION

WATER HAZARD CLASSIFICATION: Not a known pollutant.

13 DISPOSAL CONSIDERATIONS

DISPOSAL METHODS: MAGNESOL® products are not regulated under RCRA landfill requirements. However, under RCRA, it is the responsibility of the user of products to determine, at the time of disposal, whether the product falls under RCRA as a regulatory waste. This is because product uses, transformations, synthesis, mixtures, etc., may render the resulting end-product subject to regulation.

14 TRANSPORT INFORMATION

DOT CLASS: Not Regulated
UN/NA NO.: Not Classified
FREIGHT CLASSIFICATION: NMFC - 48210 Column 55
IMO CLASS: Not Classified

15 REGULATORY INFORMATION

This material is not listed in Sections 302, 312, or 313 of SARA III.
It is reported in the TOSCA Inventory, 1986.

16 OTHER INFORMATION

APPROXIMATE CHEMICAL FORMULA:	MgO:2.6SiO ₂ •H ₂ O
International Numbering System (INS) number	553i
European Union E number	E553a(i)
EINECS number:	215-681-1

16 OTHER INFORMATION, con't

References A through D and F are specific to magnesium silicate with the approximate chemical formula $MgO:2.6SiO_2 \cdot H_2O$:

- A. 21 CFR Part 182, Subpart C - Generally recognized as safe.
- B. Chemical Toxicology of Commercial Products, Edition 4, 1976 - No acute toxicology recognized.
- C. Chemical Abstracts, 1958, 6721 Referring to USSR Medical Prom.10, No.4, Moscow, USSR - The powder is well tolerated by white rats, dogs, and cats.
- D. NIOSH Registry of Toxic Effects of Chemical Substances, Vol. 2, 1986 - Irritation data: Human skin-300 micro gram/3 days. Very mild.
- E. American Conference of Government Industrial Hygienists - The 1998-99 issue does not list magnesium silicate in the substance index. A threshold limit value - time weighted average (TLV-TWA) of 10 mg/m³ of total dust is recommended for substances for which no specific TLVs have been assigned.
- F. Magnesium silicate with an approximate chemical formula of $MgO:2.6SiO_2 \cdot H_2O$ is not listed in:
 - 1. IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Man, 1988
 - 2. Industrial Hygiene and Toxicology, F. A. Patty
 - 3. Industrial Toxicology, Alice Hamilton and Harriet Hardy
 - 4. Toxicology of the Eye, W. Morton Grant
 - 5. Dangerous Properties of Industrial Materials, Sax and Lewis
 - 6. Government Publications:
 - a. NIOSH/OSHA Pocket Guide to Chemical Hazards
 - b. Registry of Toxic Effects of Chemical Substances
 - c. The Industrial Environment - It's Evaluation and Control

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FOR MORE INFORMATION CALL 812-283-6675

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