



SAFETY DATA SHEET

Emergency Telephone Numbers:
1-734-753-4410
1-734-753-4160 (Fax)
Ask for AJF Inc. Quality Dept

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

OHSA 29 CFR 1910.1200

Product Identifier-Common Names: Magnesium Oxide (MgO)

Product Trade Names: QMAG 92, QMAG 95

Product Use: Industrial use only; Steel and Foundry Applications

Manufacturer of Product: AJF Inc.
P.O.Box 697
New Boston, MI 48164
Telephone: 734-753-4410
Fax: 734-753-4160
Emergency Contact- 734-753-4410 (8:00am – 4:30pm Eastern Time, Monday-Friday)

SECTION 2 – HAZARDS IDENTIFICATION

- 2.1 Classification – Not Classified
- 2.2 GHS-US labeling – No Labeling applicable
- 2.3 Other hazards – No additional information available
- 2.4 Unknown – acute toxicity (GHS-US) - None

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

NAME	Product Identifier	% Composition	GHS-US classification
Magnesium Oxide	CAS No. 1309-48-4	60-100%	Not Classified
Sodium Hexametaphosphate	CAS No. 68915-31-1	1-5%	Not Classified

SECTION 4 – FIRST AID MEASURES

Inhalation: Move exposed person to fresh air. Get medical attention if symptoms occur.

Eye Contact: Flush immediately with clean water for 15 minutes. If irritation persists, seek medical attention.

Skin Contact: Wash with mild soap and water. If irritation develops, consult a physician.

Ingestion: Wash out mouth with water. Contact physician immediately. Do not induce vomiting unless instructed to do so by physician.

Principal symptoms and health effects both acute and delayed:

Inhalation: May cause respiratory irritation, sneezing, coughing, burning sensation in the throat or constriction of the larynx, or difficulty breathing.



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Eye Contact: May cause redness, irritation or pain

Skin Contact: Prolonged contact with large amounts of this product may cause mechanical irritation. Dust may cause irritation in skin folds or by contact in combination with tight clothing.

Ingestion: Rinse mouth. Do not induce vomiting.

Chronic Symptoms: Shortness of breath, wheezing, cough and sputum production. May cause cancer, silicosis, lung disease, autoimmune disease, tuberculosis, and nephrotoxicity.

Indication of any immediate medical attention and special treatment: No Specific actions are required.

SECTION 5 – FIRE-FIGHTING MEASURES

Extinguishing Media: Use fire extinguishing media appropriate for surrounding area

Fire Hazard: If heated to (> 1700° C), magnesium oxide fumes may be generated.

Advice for firefighters: No specific firefighting instructions are required Use normal individual personal protective equipment and fight fire from a reasonable distance using normal precautions.

Product is NON-FLAMMABLE; NON-EXPLOSIVE and NON-REACTIVE

SECTION 6 – ACCIDENTAL RELEASE MEASURES

General: Do not breathe dust. Avoid generating airborne dust. May collect the material using a vacuum method.

Protective Equipment: Wear protective clothing as appropriate for the work environment, including gloves, and eye/face protection as recommended in Section 8 – Exposure controls/personal protection.

Environmental Precautions: Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters

Methods for material containment/clean up: Avoid dry sweeping or otherwise generating dust during clean-up. Use water spraying or vacuum cleaning systems to prevent airborne dust generation.

SECTION 7 – HANDLING AND STORAGE

Handling: Avoid airborne dust generation/keep to minimum. Provide appropriate exhaust ventilation at places where dust is formed. Do not breathe dust. Avoid contact with eyes and skin. Avoid prolonged exposure. Wear personal protective equipment. Wash thoroughly after handling. Avoid release to the environment.

Storage: Store in a cool dry place. Keep containers closed and store packaged products so as to prevent accidental bursting.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

Hazardous Components Specific Chemical Identity:	CAS NO.	% (Optional)	OSHA PEL (TLV-TWA)	ACGIH TLV (TLV-TWA)
Magnesium Oxide as dust	1309-48-4	60-100	15 mg/m ³ (total)	10 mg/m ³
Sodium Hexametaphosphate	68915-31-1	1-5	n/a	n/a

Exposure Controls: Occupational exposure to nuisance dust (total and respirable) should be monitored at all times.

Engineering Controls: Minimize the generation of airborne dust. Use process controls, local exhaust ventilation, or other engineering controls to maintain airborne levels below the limit shown above. Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment:

Respiratory Protection: Wear suitable respiratory equipment; use air-purifying respirator equipped with particulate filtering cartridges.

Up to **100 MG/M3**: any dust, mist or fume respirator; any air supplied respirator; or, self-contained breathing apparatus. **Up to 250 MG/M3**: any supplied air respirator operated in a continuous flow mode or any powered air purifying respirator with a dust/mist/fume filter. **Up to 500 MG/M3**: high efficiency particulate filter with full face piece; any powered air supplied respirator with a tight fitting face piece and a high efficiency particulate filter; any self-contained breathing apparatus with a full face piece; any supplied air respirator with a full face piece. Up to **7500 MG/M3**: any air supplied respirator with full face piece and operated in a pressure demand or other positive pressure mode.

Eye Protection: Goggles are recommended where airborne dust is produced.

Hand and skin: Impermeable gloves are recommended in situations where abrasion from sand may occur. Wash hands with soap and water after use.

Other: Wear protective clothing as appropriate for the work environment. Dusty clothing should be laundered before it is reused. Do not take dust clothing home. Do not eat, drink or smoke when using.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Granular mixture, gray/brown color	Melting Point:	2827 (2797 – 2857) C ⁰
Solubility in Water:	Insoluble in water	Boiling Point:	3600 C ⁰
Specific Gravity (Water=1):	Not determined	Vapor Pressure:	Not Applicable
Odor:	None	Vapor Density:	Not Applicable

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SECTION 10 – STABILITY AND REACTIVITY

Reactivity	Product can react with concentrated acids, chlorine trifluoride.
Stability:	Material is stable under normal conditions
Conditions to avoid:	None known
Incompatibility (materials to avoid):	Product can react with concentrated acids, chlorine trifluoride
Hazardous Decomposition or By-products:	None

SECTION 11 – TOXICOLOGICAL INFORMATION

Hazardous Ingredients

LD₅₀

LC₅₀

Magnesium Oxide

3990 mg/kg

Not Applicable

Sodium Hexametaphosphate

Not Applicable

Not Applicable

Name of Toxicologically Synergistic Products:

GRAM material is not flammable, combustible or explosive. It does not cause burns or severe skin or eye irritation. A single exposure will not result in serious adverse health effects.

Route(s) of Entry: Inhalation? - Yes Skin Contact? - Yes Ingestion? - Not anticipated entry.

Potential Adverse human health effects and symptoms:

Symptoms/injuries after inhalation:	Inhalation may cause irritation, cough, shortness of breath
Symptoms/injuries after skin contact:	Effects of skin contact may include skin irritation
Symptoms/injuries after eye contact:	May cause eye irritation.
Symptoms/injuries after ingestion:	Ingestion generally cause purging of the bowels. Swallowing large amounts may cause bowel obstruction.

Medical Conditions Generally Aggravated by Exposure: The condition of individuals with lung disease (e.g., bronchitis, emphysema, chronic obstructive pulmonary disease) can be aggravated by exposure.

SECTION 12 – ECOLOGICAL INFORMATION

Toxicity	Not relevant
Persistence and degradability	Not biodegradable
Bioaccumulative potential	Not known to bioaccumulate
Mobility in soil	Negligible



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SECTION 13 – DISPOSAL CONSIDERATIONS

Waste Codes	Not applicable
Disposal Instructions	This product, in its present state, when discarded or disposed of, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste.

SECTION 14 – TRANSPORT INFORMATION

UN Number	Not relevant
UN Proper Shipping Name	Not relevant
Transport Hazard Class	Not regulated as dangerous goods
Packing Group	Not applicable
Environmental Hazards	Not relevant
Special Precautions for User	No special precautions

SECTION 15 – REGULATORY INFORMATION

US Federal Regulations

SARA 311/312 Classification:	Immediate and delayed (acute) health hazard
SARA 313 – Supplier Notification: (US EPCRA Title III) Emission Reporting	This notification must not be detached from this SDS and any copying of the SDS must include this notice, as required by 40CFR part 372; Magnesium oxide is not subject to Form R reporting requirements.
The following components listed:	Magnesium oxide fume
SARA 302 Extremely Hazardous Substance:	None
Clean Air Act (CAA)	Does not contain ozone depleting substances
TSCA Section 12(b) Export Notification:	Not Regulated

STATE REGULATIONS

Illinois	Right To Know - Substance List
Massachusetts RTK	Right To Know
New Jersey Worker RTK	Right To Know
Pennsylvania RTK	Right To Know
Minnesota RTK	Right To Know
Maine RTK	

INTERNATIONAL REGULATIONS

Australia Inventory (ACIS)	All components are listed or exempted
Canada Inventory (DSL & NDSL)	All components are listed or exempted
Japan Inventory (ENCS)	Not determined
China Inventory (IECSC)	Not determined



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Europe (EINECS)	All components are listed or exempted
Korea Inventory (ECL)	All components are listed or exempted
New Zealand Inventory	Not determined
Philippines Inventory (PICCS)	Not determined
United States & Puerto Rico (TSCA)	All components are listed or exempted

SECTION 16 – OTHER INFORMATION

Data Sources:

ACGIH 2000

Chemical Inspection & Regulation Service; accessed at: [www.cirsreach.com/Inventory/Global_Chemical Inventories](http://www.cirsreach.com/Inventory/Global_Chemical_Inventories)

Ind.Exposure & Control Techn. For OSHA Regulated Substances – MgO (fume), March, 1989, pp. 1181-1184,

NIOSH Occupational Health Guide for chemical substances – Vol. II, Sept. 1978

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on

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

RTECS, June 1998

TSCA Chemical Substance Inventory: www.epa.gov/oppt/existingchemicals/pubs/tscainvntory.howto.html

US National Library of Medicine National Institutes of Health Haz-Map: www.hazmap.nlm.nih.gov

HMIS ratings:

Health: 0
Flammability: 0
Physical Hazard: 0

NFPA ratings:

Health: 0
Flammability: 0
Instability: 0

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