



Health	1
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Reactivity	0
Personal Protection	E

## Material Safety Data Sheet

### Sodium magnesium aluminosilicate MSDS

#### Section 1: Chemical Product and Company Identification

**Product Name:** Sodium magnesium aluminosilicate

**Catalog Codes:** SLS2401

**CAS#:** 12040-43-6

**RTECS:** Not applicable.

**TSCA:** TSCA 8(b) inventory: Sodium magnesium aluminosilicate

**CI#:** Not applicable.

**Synonym:** Silicic Acid, aluminum magnesium sodium salt

**Chemical Name:** Sodium magnesium aluminosilicate

**Chemical Formula:** Not applicable.

**Contact Information:**

**Sciencelab.com, Inc.**

14025 Smith Rd.

Houston, Texas 77396

US Sales: **1-800-901-7247**

International Sales: **1-281-441-4400**

Order Online: [ScienceLab.com](http://ScienceLab.com)

**CHEMTREC (24HR Emergency Telephone), call:**

1-800-424-9300

**International CHEMTREC, call:** 1-703-527-3887

**For non-emergency assistance, call:** 1-281-441-4400

#### Section 2: Composition and Information on Ingredients

**Composition:**

Name	CAS #	% by Weight
Sodium Oxide	1313-59-3	3-9
Magnesium oxide	1309-48-4	1-3
Aluminum oxide	1344-28-1	9-13
Silicon Dioxide, Amorphous	7631-86-9 or	65-75
	112926-00-8	

**Toxicological Data on Ingredients:** Sodium Oxide LD50: Not available. LC50: Not available. Magnesium oxide LD50: Not available. LC50: Not available. Aluminum oxide LD50: Not available. LC50: Not available. Silicon Dioxide, Amorphous: ORAL (LD50): Acute: 3160 mg/kg [Rat].

#### Section 3: Hazards Identification

**Potential Acute Health Effects:**

Slightly hazardous in case of skin contact (corrosive, irritant), of eye contact (irritant, corrosive), of ingestion, of inhalation.

**Potential Chronic Health Effects:**

**CARCINOGENIC EFFECTS:** Classified A4 (Not classifiable for human or animal.) by ACGIH [Aluminum oxide].

Classified 3 (Not classifiable for human.) by IARC [Silicon Dioxide, Amorphous].  
MUTAGENIC EFFECTS: Not available.  
TERATOGENIC EFFECTS: Classified None. for human [Aluminum oxide].  
DEVELOPMENTAL TOXICITY: Not available.  
The substance may be toxic to lungs, upper respiratory tract.  
Repeated or prolonged exposure to the substance can produce target organs damage.

#### Section 4: First Aid Measures

**Eye Contact:**

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

**Skin Contact:**

In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

**Serious Skin Contact:** Not available.

**Inhalation:**

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**Serious Inhalation:** Not available.

**Ingestion:**

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

**Serious Ingestion:** Not available.

#### Section 5: Fire and Explosion Data

**Flammability of the Product:** Non-flammable.

**Auto-Ignition Temperature:** Not applicable.

**Flash Points:** Not applicable.

**Flammable Limits:** Not applicable.

**Products of Combustion:** Not available.

**Fire Hazards in Presence of Various Substances:** Not applicable.

**Explosion Hazards in Presence of Various Substances:**

Risks of explosion of the product in presence of mechanical impact: Not available.

Risks of explosion of the product in presence of static discharge: Not available.

**Fire Fighting Media and Instructions:** Not applicable.

**Special Remarks on Fire Hazards:** Not available.

**Special Remarks on Explosion Hazards:**

Magnesium Oxide may ignite and explode when heated with sublimed sulfur, magnesium powder, or aluminum powder. (Magnesium oxide)

## Section 6: Accidental Release Measures

### Small Spill:

Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

### Large Spill:

Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

## Section 7: Handling and Storage

### Precautions:

Keep container dry. Do not ingest. Do not breathe dust. Never add water to this product. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes.

**Storage:** Keep container tightly closed. Keep container in a cool, well-ventilated area.

## Section 8: Exposure Controls/Personal Protection

### Engineering Controls:

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

### Personal Protection:

Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

### Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

### Exposure Limits:

Magnesium oxide

TWA: 10 (mg/m<sup>3</sup>) from ACGIH (TLV) [United States] Inhalation Total.

TWA: 4 STEL: 10 (mg/m<sup>3</sup>) [United Kingdom (UK)] Inhalation Respirable.

TWA: 15 (mg/m<sup>3</sup>) from OSHA (PEL) [United States] Inhalation Total.

TWA: 10 (mg/m<sup>3</sup>) [United Kingdom (UK)] Total.

Aluminum oxide

TWA: 10 (mg/m<sup>3</sup>) from ACGIH (TLV) [United States] Inhalation Total.

TWA: 10 (mg/m<sup>3</sup>) [Canada] Inhalation Total.

TWA: 5 (mg/m<sup>3</sup>) from OSHA (PEL) [United States] Inhalation Respirable.

TWA: 15 from OSHA (PEL) [United States] Inhalation Total.

TWA: 10 [United Kingdom (UK)] Inhalation Total.

TWA: 4 [United Kingdom (UK)] Inhalation Respirable.

Silicon Dioxide, Amorphous

TWA: 10 (mg/m<sup>3</sup>) from ACGIH (TLV) [United States] Inhalation Total.

TWA: 6 (mg/m<sup>3</sup>) from OSHA (PEL) [United States] Inhalation Total.<sup>3</sup>

Consult local authorities for acceptable exposure limits.

## Section 9: Physical and Chemical Properties

**Physical state and appearance:** Solid.

**Odor:** Odorless.

**Taste:** Not available.

**Molecular Weight:** Not applicable.

**Color:** White.

**pH (1% soln/water):** Not applicable.

**Boiling Point:** Not available.

**Melting Point:** 2800°C (5072°F) based on data for: Magnesium oxide. Weighted average: 1671.26°C (3040.3°F)

**Critical Temperature:** Not available.

**Specific Gravity:** Weighted average: 2.17 (Water = 1)

**Vapor Pressure:** Not applicable.

**Vapor Density:** Not available.

**Volatility:** Not available.

**Odor Threshold:** Not available.

**Water/Oil Dist. Coeff.:** Not available.

**Ionicity (in Water):** Not available.

**Dispersion Properties:** Is not dispersed in cold water, hot water.

**Solubility:**

Insoluble in cold water, hot water.

Amorphous Silicon Dioxide is very slightly soluble in alkali. It is soluble in hot KOH or NaOH solutions. It is insoluble in ethanol and in acids except Hydrofluoric Acid.

Aluminum oxide is practically insoluble in non-polar organic solvents.

It is slowly soluble in aqueous alkaline solution-forming hydroxides.

## Section 10: Stability and Reactivity Data

**Stability:** The product is stable.

**Instability Temperature:** Not available.

**Conditions of Instability:** Incompatible materials, dust generation

**Incompatibility with various substances:** Slightly reactive to reactive with oxidizing agents, acids, moisture.

**Corrosivity:** Non-corrosive in presence of glass.

**Special Remarks on Reactivity:**

May be converted to crystalline silica when heated above 950 C.

Incompatible with (hydrogen) fluoride, oxygen difluoride, chlorine trifluoride. May react vigorously with vinyl acetate vapor.

**Special Remarks on Corrosivity:** Not available.

**Polymerization:** Will not occur.

## Section 11: Toxicological Information

**Routes of Entry:** Inhalation. Ingestion.

**Toxicity to Animals:** Acute oral toxicity (LD50): 3160 mg/kg [Rat]. (Silicon Dioxide, Amorphous).

**Chronic Effects on Humans:**

CARCINOGENIC EFFECTS: Classified A4 (Not classifiable for human or animal.) by ACGIH [Aluminum oxide].  
Classified 3 (Not classifiable for human.) by IARC [Silicon Dioxide, Amorphous].

TERATOGENIC EFFECTS: Classified None. for human [Aluminum oxide].

Contains material which may cause damage to the following organs: lungs, upper respiratory tract.

**Other Toxic Effects on Humans:** Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation.

**Special Remarks on Toxicity to Animals:** Not available.

**Special Remarks on Chronic Effects on Humans:** May cause cancer (tumorigenic) according to animal data. No human data found. (Aluminum oxide)

**Special Remarks on other Toxic Effects on Humans:**

Acute Potential Health Effects:

Skin: May cause drying of the skin.

Eyes: Dust may cause irritation.

Inhalation: May cause respiratory tract irritation and drying of the mucous membranes. May affect lungs and respiration.

Ingestion: Low hazard expected for normal industrial handling and use.

Chronic Potential Health Effects:

Prolonged or repeated contact may cause skin and mucous membrane irritation.

## Section 12: Ecological Information

**Ecotoxicity:** Not available.

**BOD5 and COD:** Not available.

**Products of Biodegradation:**

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

**Toxicity of the Products of Biodegradation:** The product itself and its products of degradation are not toxic.

**Special Remarks on the Products of Biodegradation:** Not available.

## Section 13: Disposal Considerations

**Waste Disposal:**

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

## Section 14: Transport Information

**DOT Classification:** Not a DOT controlled material (United States).

**Identification:** Not applicable.

**Special Provisions for Transport:** Not applicable.

## Section 15: Other Regulatory Information

**Federal and State Regulations:** TSCA 8(b) inventory: Sodium magnesium aluminosilicate

**Other Regulations:**

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

**Other Classifications:**

**WHMIS (Canada):** Not controlled under WHMIS (Canada).

**DSCL (EEC):**

R36/38- Irritating to eyes and skin.

S2- Keep out of the reach of children.

S46- If swallowed, seek medical advice immediately and show this container or label.

**HMIS (U.S.A.):**

**Health Hazard:** 1

**Fire Hazard:** 0

**Reactivity:** 0

**Personal Protection:** E

**National Fire Protection Association (U.S.A.):**

**Health:** 1

**Flammability:** 0

**Reactivity:** 1

**Specific hazard:**

**Protective Equipment:**

Gloves.

Lab coat.

Dust respirator. Be sure to use an approved/certified respirator or equivalent.

Splash goggles.

## Section 16: Other Information

**References:** Not available.

**Other Special Considerations:** Not available.

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