

**Materials Safety Data Sheet**  
Aluminum Oxide

**SECTION I – General Information**

Manufacturer's Name:	Groman Inc.
	4900 NW 15 <sup>th</sup> Street, Suite 4494
	Margate, FL 33063
Telephone:	(954) 649-8008
Company Contact:	Compliance Manager
Date (Revised):	October 12, 2004
Product/Trade Name:	Fused Aluminum Oxide
Synonyms:	Alpha Alumina
Chemical Family:	Refractory Oxide
Formula:	Al <sub>2</sub> O <sub>3</sub>

**SECTION II – Hazardous Components**

None

**SECTION III – Physical Data**

Melting Temperature:	3700 Degrees F (2038 degrees C)
Specific Gravity:	3.97 gm/cc
Hardness:	9 Mohs scale; 2100 Knoop Scale
Water Solubility:	Insoluble in water and organic solvents
pH:	7-8
Color:	Light brown or white
Odor:	None, odorless

**SECTION IV – Fire & Explosion Data**

Non-flammable; does not support combustion. Not an explosion hazard.

**SECTION V – Health Data**

Chemical Name	C.A.S. NO	Percent	Limits for air contaminants	
			TWA Mg/M3	PEL Mg/M3
Alpha Alumina (Al <sub>2</sub> O <sub>3</sub> )	1344-28-1	99+%		
Total Dust			10(e)	15
Respirable Fraction			5	5

**Source of Exposure Limit Data**

ACGIH Threshold Limit Values; OSHA Tables: Z-1-A, Z-2, Z-3

Possible effects of Overexposure: Individuals with lung disorders should not be exposed to conditions where large airborne quantities of the nuisance dust exist without precautions taken to alleviate the aggravated preexisting medical condition.

Inhalation:	Choking sensation, respiratory system passageways irritation.
Skin Contact:	No evidence of adverse effects expected.
Eye Contact:	May cause Irritation.
Swallowing:	Non-toxic. May cause irritation of the throat and digestive passageways.
Carcinogen:	No evidence of carcinogenicity.

**SECTION VI – Reactivity Data**

None with water, air, heat, or strong oxidizers.

**SECTION VII – Environmental**

Waste may be considered as inert material.

**SECTION VIII – Handling, Storage, Transportation**

Stable under normal conditions of use, transportation, and storage.

Spill, leak and disposal: Avoid dust during cleanup.

**SECTION IX – Special Precautions**

Use with adequate ventilation to meet exposure limits. When exposure is excessive, NIOSH approved respiratory protection should be used.

**Materials Safety Data Sheet**  
Sodium Bicarbonate

**SECTION I – General Information**

Manufacturer's Name:	Groman Inc.
	4900 NW 15 <sup>th</sup> Street, Suite 4494
	Margate, FL 33063
Telephone:	(954) 649-8008
Company Contact:	Compliance Manager
Date (Revised):	August 10, 2006
Product/Trade Name:	Sodium Bicarbonate
Synonyms:	Baking Soda
Chemical Family:	Alkali
Formula:	NaHCO <sub>3</sub>

**SECTION II – Hazardous Components**

None

**SECTION III – Physical Data**

Melting Temperature:	N/A
Specific Gravity:	60 Lb/ft <sup>3</sup> @ 72 °F
Hardness:	N/A
Water Solubility:	16g/100ml @ 60 °C
pH:	7-8
Color:	White powder
Odor:	None, odorless

**SECTION IV – Fire & Explosion Data**

Non-flammable; does not support combustion. Not an explosion hazard.

**SECTION V – Health Data**

Inhalation (acute):	Choking sensation, respiratory system passageways irritation- May cause coughing, shortness of breath. Provide fresh air, apply artificial respiration as needed. Obtain first aid or medical assistance, if needed.
Skin Contact:	Not absorbed through skin. No evidence of adverse effects expected.
Eye Contact:	May cause Irritation - Wash with large amounts of water, obtain first aid or medical assistance, if needed.
Swallowing:	Gross ingestion (1/2lb+) may cause Alkalosis; However, as a natural material in the body its is well tolerated. Other potential health risks not known.
Carcinogen:	No evidence of carcinogenicity.

**Source of Exposure Limit Data**

ACGIH Threshold Limit Values – N/A

Possible effects of Overexposure: Individuals with lung disorders should not be exposed to conditions where large airborne quantities of the nuisance dust exist without precautions taken to alleviate the aggravated preexisting medical condition.

**SECTION VI – Reactivity Data**

Avoid contact with Strong Acids.

**SECTION VII – Environmental**

Waste may be considered as inert material.

**SECTION VIII – Handling, Storage, Transportation**

Stable under normal conditions of use, transportation, and storage.

Spill, leak and disposal: Avoid dust during cleanup.

**SECTION IX – Special Precautions**

Use with adequate ventilation to meet exposure limits. When exposure is excessive, NIOSH approved respiratory protection should be used. See OSHA 29CFR1910.24 and 29CFR1910.1000

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