Section 1: Product and Company Identification

Product Name: Magnum Products Strength enhancing mine sealant

Product Identifiers:

Magnum Bond

Other means of identification: mine sealant, void sealant

Recommended Use: For a perimeter and void sealant for new work and repair work for mine ventilation systems. Approved for dry stacked stoppings, sealing of metal stoppings, dry stacked overcasts, can also be used for seal roof and ribs.

Restrictions on Use: Use in well ventilated area avoid breathing dust, use personal protective equipment, avoid skin contact.

Manufacturer/Supplier Details

Magnum Products
15740 W. 108th Street
Lenexa, KS 66219

Emergency Telephone Number

Day (913) 888-0882 Night (913) 894-2382 Fax (913) 888-5167
Website: www.Magnum-Products.com

Section 2: Hazards Identification

United States (US)

According to OSHA 29CFR 1910.1200 (HCS)

GHS Classification of the substance or mixture

Carcinogenicity - Category 1A - (H-350)
Specific target organ toxicity, repeated exposure – Category 1 (H-372)
Acute toxicity, inhalation - Category 4 (H-332)
Skin corrosion/irritation Category 2 (H315)

GHS Label Elements

Pictogram

Signal Word **Danger**

Hazard Statements

H-350 May cause cancer.
H-332 H-372 Dust harmful if inhaled. May cause damage to organs (lungs, liver, thyroid gland) through prolonged or repeated exposure. (oral)
H-315 Causes skin irritation

Section 2: Hazards Identification (Continued)

Precautionary Statements

Prevention

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not breathe dust.
Use personal protective equipment as required. (See Section 8)
Use engineering controls and wet sanding/sponging methods to minimize dust.

Response

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
If on skin, wash with plenty of soap and water.
If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Get medical attention if exposed or concerned.

Storage

Store Locked. Up keep material in a cool, dry, ventilated area, away from excessive heat and direct sunlight.

Disposal

Dispose of material in accordance with International, federal, state, and local regulations

Section 3: Composition/Information on Ingredients

	Common name	Identifiers		
Chemical Name	**Synonym**	**CAS #**	**% (weight)**	**Impurities**
Calcium Carbonate	Limestone	1317-65-3	<50	Crystalline silica CAS# 14808-60-7
And may contain one or more of the following:				
Mixture silicates And aluminates	Mica	12001-26-2	<10	Crystalline silica CAS# 14808-60-7
Mixture various metal oxides	Perlite	93763-70-3	<10	Crystalline silica CAS# 14808-60-7
Magnesium aluminum phyllosilicate	Attapulgite Clay	12174-11-7	<5	Crystalline silica CAS# 14808-60-7
Polyvinyl Acetate Latex		9003-20-7	<5	
Ethylene Vinyl Acetate Latex		24937-78-8	<5	

Section 4: First-Aid Measures

Inhalation Remove exposed individual to fresh air immediately. If breathing difficulty persists, seek medical attention.

Eye contact Do not rub or scratch eyes. Immediately flush eyes with water for 15 minutes.

Remove contact lenses (if applicable). Seek medical attention if irritation persists.

Skin contact Flush and wash skin with soap and water. Utilize lotions to alleviate dryness if present. Seek medical attention if irritation persists.

Ingestion This product is not expected to be hazardous and no harmful effects are expected upon ingestion of small amounts. Larger amounts may cause abdominal discomfort or possible obstruction of the digestive tract.

Seek medical attention if problems persist. **Medical Conditions aggravated by exposure**

Pre-existing upper respiratory and lung diseases such as, but not limited to, bronchitis, emphysema and asthma. Pre-existing skin diseases such as, but not limited to, rashes and dermatitis.

Section 5: Fire-Fighting Measures

Extinguishing Media
Dry chemical, foam, water, or extinguishing media appropriate for surrounding fire.
Unusual Fire and Explosion Hazards
Mixture poses no fire-related hazard.
Special hazards arising from the mixture
None known
Special Protective Equipment and Precautions for Firefighters
A SCBA and full protective clothing is recommended to limit exposures to combustion products when fighting any fire.

Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures
No special precautions required.
General recommendations:
Wear appropriate Personal Protective Equipment. (See Section 8)
Maintain proper ventilation.
Environmental precautions
This product does not present an ecological hazard to the environment, however this does not exclude the possibility that large and frequent spills may be harmful to the environment. Avoid discharge to sewers, drains and water systems.
Dispose of in accordance with applicable International, federal, state, and local regulations.
Methods and materials for containment and cleaning up
Shovel or scoop spilled material back into container for use, if possible, or disposal. Clean surface to remove residual contamination.
Maintain proper ventilation to minimize dust.
Avoid washing material down drains, sewers, and water systems. This material will eventually set and can cause clogs.

Section 7: Handling and Storage

Precautions for safe handling
Avoid breathing dust. Avoid contact with eyes and skin.
Minimize generation of dust.
Provide appropriate exhaust ventilation at places where dust is formed.
Wear recommended personal protective equipment when handling. (See Section 8)
Conditions for safe storage, including any incompatibilities
Store locked up. Keep material in a cool, dry, ventilated area, away from excessive heat and direct sunlight.
Keep from freezing to preserve usefulness. Maintain temperature between 50-100 degrees Fahrenheit.
Keep containers closed when not in use.
Stack material flat on floor, maximum one pallet high.
Avoid contact with strong acids.

Section 8: Exposure Controls/Personal Protection

Control Parameters

	Exposure Limits	
	OSHA PEL	ACGIH TLV
Component	(mg/m3)	(mg/m3)
Calcium Carbonate (limestone)	15 (T) 5 (R)	10 (T)

Section 8: Exposure Controls/Personal Protection (Continued)

Control Parameters

Component	Exposure Limits OSHA PEL (mg/m3)	ACGIH TLV (mg/m3)
Mica	20 mppcf	3
Perlite	15(T) 5 (R)	10 (T)
Attapulgite Clay	15(T) 5 (R)	10 (T)
Crystalline Silica 1	[(10/(%SiO2+2)] (R) [(30)/(%SiO2+2)] (T)	.025 (R)
Polyvinyl Acetate Latex	NE	NE
Ethylene Vinyl Acetate Latex	NE	NE

1-Present as an impurity in raw materials NE-None Established (T)-Total Dust (R)-Respirable Dust
Mppcf-Million particles per cubic foot

Exposure Controls

Appropriate Engineering Controls

Work/Hygiene Practices: Utilize ventilation methods to minimize dust production. Use sanders equipped with vacuum capabilities whenever possible. Utilize a light water spray when feasible, wet sand or sponge this product.
Ventilation: Provide local and general exhaust ventilation sufficient to maintain a dust level below the PEL/TLV.

Personal Protective Equipment

Respiratory Protection

A NIOSH/MSHA approved particulate respirator is recommended in poorly ventilated areas or if the PEL/TLV is exceeded. OSHA's 29 CFR 1910.134 (Respiratory Protection Standard) must be followed whenever work conditions require respirator use.

Eye Protection

Safety glasses or goggles.

Skin

Gloves, long sleeve shirts/long pants and/or barrier creams may be utilized if conditions warrant.

Section 9: Physical and Chemical Properties

(a) Appearance: A semi white to gray paste
(b) Odor: Mild latex, Low to none
(c) Odor threshold: Not applicable
(d) pH : 7-9
(e) Melting point/freezing point: Not applicable
(f) Initial boiling point and boiling range: Not applicable
(g) Flash point: Not applicable
(h) Evaporation rate: Not applicable
(i) Flammability (solid, gas): Not flammable
(j) Upper/lower flammability or explosive limits: Not applicable
(k) Vapor pressure: Not applicable
(l) Vapor density: Not applicable
(m) Relative density: ~1.0-1.8
(n) Solubility(ies): slightly soluble in water
(o) Partition coefficient: n-octanol/water: Not applicable

Section 9: Physical and Chemical Properties (Continued)

(p) Auto-ignition temperature: Not applicable
(q) Decomposition temperature: 825°C
(r) Viscosity: Not applicable
(s) Volatile organic compound (VOC) content: <2 g/l

Section 10: Stability and Reactivity

(a) Reactivity: This product is stable and non-reactive under normal conditions of use, storage and transport.
(b) Chemical stability: Stable in dry environments
(c) Possibility of hazardous reactions: None known
(d) Conditions to avoid (e.g., static discharge, shock, or vibration): None known
(e) Incompatible materials: Strong acids
(f) Hazardous decomposition products: None known. Above 825° C limestone ($CaCO_3$) decomposes to calcium oxide (CaO) and carbon dioxide.(CO_2)

Section 11: Toxicological Information

Information on Toxicological effects
Information on likely routes of exposure
Ingestion Possible abdominal obstruction.
Inhalation Dust may irritate respiratory system. Chronic exposure may result in lung disease. (See below)
Skin contact May cause irritation, rash, itching, or dermatitis.
Eye contact Dust may cause mechanical irritation.

Symptoms related to the physical, chemical and toxicological characteristics

Acute exposure to airborne dust concentrations in excess of the PEL/TLV may result in coughing, dyspnea, wheezing, and a burning irritation of the nose, throat, and upper respiratory tract, along with possible impaired pulmonary function. Chronic exposures may result in lung disease. (Silicosis and/or lung cancer)

Toxicological data

No toxicological data is available for this product. Toxicological information for components of this product listed below.
Acute toxicity: Not expected to be a hazard under normal conditions of intended use
Skin corrosion/irritation: Prolonged skin contact may cause irritation or rash.
Serious eye damage/eye irritation Not available
Skin sensitization: Contains small amounts of sensitizing substance see section 16
Respiratory sensitization Not a respiratory sensitizer
Sensitization Not available
Mutagenicity Not available
Carcinogenicity

This product contains small amounts of naturally occurring crystalline silica (quartz) an impurity in some of the raw materials. The International Agency for Research on Cancer (IARC) classifies crystalline silica inhaled in the form of quartz or cristobalite from occupational sources as carcinogenic to humans, Group 1. The National Toxicology Program (NTP) classifies respirable crystalline silica as a substance which may be reasonably anticipated to be a carcinogen. OSHA does not regulate crystalline silica as a human carcinogen. Some products may contain attapulgite clay. IARC classifies attapulgite (long fiber) carcinogenic to humans, Group 2B. Attapulgite is not classified as a carcinogen by NTP or OSHA. Exposures to respirable crystalline silica are not expected during the recommended use of this product. However, actual levels must be determined by workplace Industrial Hygiene testing.

Reproductive effects: Not expected to be a reproductive hazard
Specific target organ toxicity single exposure: Not available
Aspiration toxicity: Not an aspiration hazard

Section 12: Ecological Information

(a) Ecotoxicity (aquatic and terrestrial, where available): This product does not present an ecological hazard to the environment. Unless spills are large and frequent.
(b) Persistence and degradability: Unknown
(c) Bioaccumulative potential: Limestone is a naturally occurring mineral. Biodegradation and/or bioaccumulation potential is not applicable.
(d) Mobility in soil: Unknown
(e) Other adverse effects (such as hazardous to the ozone layer): None known

Section 13: Disposal Considerations

This material is not considered a hazardous waste. Dispose of according to Local, State, Federal, and International Environmental Regulations.

Section 14: Transport Information

This product is not a DOT hazardous material **Shipping Name:** Same as product name **ICAO/IATA/IMO:** Not applicable

Section 15: Regulatory Information

All ingredients are included on the TSCA inventory.
Federal Regulations
SARA Title III: Not listed under Sections 302, 304, and 313
CERCLA: Not listed
RCRA: Not listed
OSHA: Dust and potential respirable crystalline silica generated during product use may be hazardous.
State Regulations
California Prop 65: Respirable crystalline silica is known to the state of California to cause cancer.
Canada WHMIS
All components of this product are included in the Canadian Domestic Substances List (DSL).
Crystalline silica: WHMIS Classification D2A

Section 16: Other Information

SDS Prepared by: Magnum Products
15740 W. 108th Street
Lenexa, KS 66219
Phone Number: (913) 888-0882
Prepared: May 30,2015
Issued Date: June 1, 2015
Replaces: March 14, 2011

Trace amounts of vinyl acetate monomer and formaldehyde may be found in these products.
Skin Sensitization: These products may contain small amounts of triazinetriethanol (THT) CAS# 4719-04-4
That is below the EPA regulated limits.

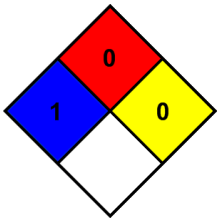
Section 16: Other Information (Continued)

Further information

Crystalline silica: Raw materials in this product may contain respirable crystalline silica. Exposures to respirable crystalline silica are not expected during the normal use of this product. However, actual levels must be determined by workplace hygiene testing. Prolonged and repeated exposure to airborne free respirable crystalline silica can result in lung disease (i.e., silicosis) and/or lung cancer.

Attapulgite: Carcinogenic to experimental animals via a route of exposure not relevant to human exposure.

NFPA health hazard: 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.
NFPA fire hazard : 0 - Materials that will not burn.
NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



Key to Abbreviations:

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstract Services Number
CFR	Code of Federal Regulations
DOT	Department of Transportation
EPA	Environmental Protection Agency
HEPA	High Efficiency Particulate Air
HCS	Hazard Communications Standard
HMIS	Hazardous Material Identification System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IMO	International Maritime Organization
NIOSH	National Institute for Occupational Safety and Health
NFPA	National Fire Protection Association
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
PPE	Personal Protective Equipment
TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
TWA	Time Weighted Average
WHMIS	Workplace Hazardous Materials Information System

SDS US (GHS HazCom 2012)

Disclaimer:

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product and is provided without warranty.