



## SAFETY DATA SHEET

### Section 1: Identification

#### 1.1 Product identifier:

Agri-Gyp™

#### 1.2 Recommended Uses:

Milled gypsum for field spread

Restrictions on use: None identified

#### 1.3 Supplier:

Western Mining and Minerals, Inc.

13555 Hwy 93 North

Apex, NV 89165

Web Site: [Web Site: www.WesternMiningandMinerals.com](http://www.WesternMiningandMinerals.com)

#### 1.4 Emergency telephone number:

888-449-7786 (24-hour)

### Section 2: Hazards Identification

#### 2.1 Classification:

Not classified under any GHS hazard classes.

#### 2.2 Label elements:

Not classified

#### 2.3 Other hazards:

Exposures to dusts may cause mild and temporary irritation to the eyes and upper respiratory tract.

This SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

### Section 3: Composition/Information on Ingredients

<u>Chemical Name</u>	<u>CAS No.</u>	<u>Wt.%</u>
Calcium sulfate dihydrate (Gypsum)	13397-24-5	92 - 100
Total Crystalline silica (Quartz) – naturally occurring impurity in Gypsum	14808-60-7	<0.1

### Section 4: First Aid Measures

#### 4.1 Description of first aid measures:

**Inhalation:** If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If exposed or concerned: Get medical advice.

**Eye Contact:** If in eyes: rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. If irritation persists get medical attention.

**Skin Contact:** If on skin, wash with plenty of soap and water. If skin irritation or rash occurs get medical advice. Take off contaminated clothing and wash it before reuse.

**Ingestion:** If exposed or concerned: Get medical advice.

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### 4.2 Most important symptoms / effects acute and delayed:

**Inhalation:** Exposures to airborne dust may cause irritation to the upper respiratory tract; symptoms of exposure may include sneezing, coughing and sore throat.

**Eye Contact:** Dust particles may cause irritation as an abrasive in the eye.

**Skin Contact:** Prolonged skin contact may be abrasive to the skin.

**Ingestion:** Gypsum has low oral toxicity. Gypsum absorbs moisture forming clumps of solid gypsum; the solid clumps may create blockages if large amounts are swallowed.

### 4.3 Indication of any immediate medical attention and special treatment needed:

Not applicable

## Section 5: Firefighting Measures

### 5.1 Extinguishing media:

Use water and other extinguishing media appropriate to the surrounding fire conditions.

### 5.2 Specific hazards arising from the product:

Product is not flammable and does not support combustion.

Under fire conditions product may decompose into sulfur oxides, calcium oxide and carbon dioxide at very high temperatures (>800°C / 1475°F).

### 5.3 Special protective equipment and precautions for fire-fighters:

As for any fire, evacuate the area and fight the fire from a safe distance. Firefighters must wear full protective equipment including self-contained breathing apparatus with chemical protection clothing when firefighters are exposed to decomposition products from this material.

## Section 6: Accidental Release Measures

### 6.1 Personal precautions, protective equipment and emergency procedures:

Ventilate the spill area if airborne dust is present.

Wear adequate personal protective equipment, including an appropriate respirator as indicated in Section 8.

Isolate spill area, preventing entry by unauthorized persons.

### 6.2 Environmental precautions:

Prevent releases into the environment.

### 6.3 Methods and material for containment and cleaning up:

Use methods that avoid raising dust in the air. Scoop or shovel spilled material or vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Small spills may be picked up with a damp cloth or mop.

## Section 7: Handling and Storage

### 7.1 Precautions for safe handling:

Read the label and follow the directions for mixing.

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Do not breathe airborne dusts.

Minimize dust generation and accumulation.

In workplaces where occupational exposure limits are exceeded, wear appropriate respiratory protection. (See Section 8).

Wash hands and exposed skin thoroughly after handling.

Do not eat, drink or smoke in the workplace where this product is handled.

### 7.2 Conditions for safe storage, including any incompatibilities:

Store in dry conditions and protected from weather.

Protect from moisture and humidity.

Keep out of reach of children.

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### Section 8: Exposure Controls / Personal Protection

#### 8.1 Control parameters:

**Occupational Exposure Limits:** Consult local authorities for acceptable exposure limits.

<u>Ingredient</u>	<u>ACGIH® TLV®</u>	<u>U.S. OSHA PEL</u>
Calcium sulfate dihydrate (Gypsum)	10 mg/m <sup>3</sup> (inhalable fraction)	5 mg/m <sup>3</sup> (respirable fraction)

#### 8.2 Exposure controls:

**Engineering Controls:** General ventilation is adequate for application of product in its original form. If airborne particulates are generated, monitor dust concentrations in air and provide local exhaust ventilation when any exposure guideline is exceeded.

If engineering controls and work practices are not effective in controlling exposure to this material or if adverse health symptoms are experienced, then wear suitable personal protection equipment including approved respiratory protection. Have appropriate equipment available for use in emergencies such as spills or fire.

**Eye/Face Protection:** Wear safety goggles.

**Skin Protection:** Wear protective gloves. Launder contaminated clothing before re-wearing, or discard.

**Respiratory Protection:** When dust concentrations in air exceed the occupational exposure guidelines, take the following precautions:

- Wear a NIOSH approved dust respirator.
- Maintain adequate ventilation and air circulation.
- Warn others in the area.

A respiratory protection program that meets the regulatory requirement, such as OSHA's 29 CFR 1910.134, ANSI Z88.2 or Canadian Standards Association (CSA) Standard Z94.4, must be followed whenever workplace conditions warrant a respirator's use.

### Section 9: Physical and Chemical Properties

#### 9.1 Information on basic physical and chemical properties:

<b>Appearance:</b>	Powdered solid; white to light pink powder
<b>Odor:</b>	Odorless
<b>Odor threshold:</b>	Not applicable
<b>pH:</b>	Not applicable
<b>Melting point:</b>	Not available
<b>Initial boiling point and boiling range:</b>	Not applicable
<b>Flash point:</b>	Not applicable
<b>Flammability:</b>	Not flammable or combustible
<b>Auto-ignition temperature:</b>	Not available
<b>Upper/lower flammability or explosive limits:</b>	Not applicable
<b>Explosive properties:</b>	Not applicable
<b>Oxidizing properties:</b>	Not applicable
<b>Evaporation rate:</b>	Not applicable
<b>Vapor pressure:</b>	Not applicable
<b>Vapor density:</b>	Not applicable
<b>Relative density:</b>	2.23 (water=1)
<b>Solubility (ies):</b>	2.41 g/L; Low solubility in water
<b>Partition coefficient (n-octanol/water):</b>	Not applicable
<b>Decomposition temperature:</b>	Not available
<b>Viscosity:</b>	Not applicable

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### Section 10: Stability and Reactivity

**10.1 Reactivity:**

Not classified for reactivity hazards. Mixing with water generates heat.

**10.2 Chemical Stability:**

Stable at normal ambient and anticipated storage and handling conditions.

**10.3 Possibility of Hazardous Reactions:**

None known.

**10.4 Conditions to Avoid:**

Avoid generation of airborne dust.

**10.5 Incompatible Materials:**

Reactions may occur with the following highly reactive materials:

Aluminum - reduction by aluminum at high temperature caused violent explosion.

Diazomethane - contact with diazomethane vapor can generate heat which may lead to detonation.

**10.6 Hazardous Decomposition Products:**

Corrosive sulfur oxides may form if product is exposed to extreme heat.

### Section 11: Toxicological Information

**11.1 Information on toxicological effects:**
**Likely routes of exposure**

Inhalation; Ingestion, Skin contact; Eye contact.

**Acute toxicity**

**Inhalation:** Calcium sulfate, dihydrate LC<sub>50</sub> > 3.26 mg/L (rat) as dust. No mortality at the highest dose level.  
 OECD Guideline 403 (Acute Inhalation Toxicity)

**Ingestion:** Calcium sulfate dihydrate LD<sub>50</sub> > 2000 mg/kg bw (rat). No mortality at the highest dose level.  
 OECD Guideline 420 (Acute Oral Toxicity Fixed Dose Method)

**Skin:** Not absorbed through the skin.

**Acute toxicity data:**

<u>Ingredient</u>	<u>LD<sub>50</sub> Oral</u> (mg/kg)	<u>LD<sub>50</sub> Dermal</u> (mg/kg)	<u>LC<sub>50</sub> Inhalation</u> (4 hrs.)
Calcium sulfate dihydrate (Gypsum)	> 2000 (rat)	Not available	> 3.26 mg/L (rat)

**Skin corrosion / irritation**

Not a skin irritant. test according to OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

**Serious eye damage / irritation**

Not an eye irritant. test according to OECD Guideline 405 (Acute Eye Irritation / Corrosion)

**STOT (Specific Target Organ Toxicity) – Single exposure**

Data not available. Inhaling high concentrations of dust may cause coughing and mild, temporary irritation.

**STOT (Specific Target Organ Toxicity) – Repeated exposure**

An oral NOAEL for calcium sulfate was 79 mg/kg/day (male rat).

Prolonged and repeated breathing of high concentrations of nuisance dusts may cause pulmonary fibrosis.

**Aspiration hazard**

Does not meet criteria for classification for aspiration toxicity.

**Sensitization - respiratory and/or skin**

Not known to be a skin or respiratory sensitizer.

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### Section 11: Toxicological Information, continued

#### Carcinogenicity

Gypsum (Calcium sulfate dihydrate) is not listed as a carcinogen by the International Agency for Research on Cancer (IARC), the American Conference of Governmental Industrial Hygienists (ACGIH®) or the US National Toxicology Program (NTP).

Natural mineral Gypsum may contain trace amounts (<0.1%) of Crystalline Silica as a naturally occurring impurity. Analytical results from samples of bulk product did not detect crystalline silica in the samples.

#### Reproductive toxicity

**Development of offspring:** Data not available

**Sexual function and fertility:** Data not available

**Effects on or via lactation:** Data not available

#### Germ cell mutagenicity

Data not available

#### Interactive effects

Tobacco smoking in combination with long-term high dust exposures may increase both smoking and dust-related pulmonary health problems.

### Section 12: Ecological Information

#### 12.1 Toxicity:

Ecotoxicity data are not available. Composed of naturally occurring earth minerals.

#### 12.2 Persistence and degradability:

Not available

#### 12.3 Bioaccumulative potential:

Not available

#### 12.4 Mobility in soil:

Not available

#### 12.5 Other adverse effects:

Not available

### Section 13: Disposal Considerations

#### 13.1 Disposal methods:

Store material for disposal as indicated in Section 7 Handling and Storage.

The required hazard evaluation of the waste and compliance with the applicable hazardous waste laws are the responsibility of the user. Dispose of contents and container in accordance with local, regional, national and international regulations.

### Section 14: Transport Information

#### 14.1 UN Number

Not regulated by international transport regulations (IMDG, UN Model Regulations).

#### 14.2 UN proper shipping name

Not applicable

#### 14.3 Transport hazard class(es)

Not applicable

#### 14.4 Packing group

Not applicable

#### 14.5 Environmental hazards

Not available



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### 14.6 Special precautions for user

Not available

### 14.7 U.S. Hazardous Materials Regulation (DOT 49CFR):

Not regulated

### 14.8 Canada Transportation of Dangerous Goods (TDG) Regulations:

Not regulated

## Section 15: Regulatory Information

### 15.1 Safety, health and environmental regulations/legislation:

#### Analytical results for hazardous substances:

Crystalline silica, quartz (14808-60-7): None detected in NIOSH method 7500 of bulk sample by XRD.

Asbestos fibers: None detected in Asbestos fibers analysis by polarized light microscopy (EPA/600/R-93/116 & EPA/600/M4-82-020)

#### USA

##### TSCA Status:

Substances are listed on the TSCA inventory or are exempt.

#### Canada

This product has been classified in accordance with the hazard criteria of the *Controlled Products Regulations* and the SDS contains all the information required by the *Controlled Products Regulations* (WHMIS 1988).

##### WHMIS Classification:

WHMIS 1988: Not controlled.

WHMIS 2015: Not classified in any WHMIS hazard class.

##### NSNR Status:

Component substances are listed on the on the DSL or are exempt.

## Section 16: Other Information

### Revision date:

December 9, 2015

### References and sources for data:

CCOHS, Cheminfo

RTECS, Registry of Toxic Effects of Chemical Substances

NIOSH, Pocket Guide to Chemical Hazards.

### Legend to abbreviations:

ACGIH – American Conference of Governmental Industrial Hygienists

GHS- Globally Harmonized System for Classification and Labeling.

IARC - The International Agency for Research on Cancer

OEL– Occupational exposure limit

OSHA - Occupational Safety and Health Administration

TWA – Time weighted average

TLV - Threshold Limit Value

WHMIS – Workplace Hazardous Materials Information System.

### Additional information:

Information listed is believed to be accurate but not warranted or guaranteed.