SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

<table>
<thead>
<tr>
<th>PRODUCT IDENTIFIER</th>
<th>Marbet 816 Mule Mix Conditioner</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEMICAL NAME</td>
<td>Montmorillonite Clay, Calcined</td>
</tr>
<tr>
<td>CHEMICAL FAMILY</td>
<td>Clay</td>
</tr>
<tr>
<td>MATERIAL USE</td>
<td>Soil Amendment</td>
</tr>
<tr>
<td>RESTRICTION ON USE</td>
<td>None Known</td>
</tr>
<tr>
<td>MANUFACTURER</td>
<td>EP Minerals, LLC., 9785 Gateway Dr., Reno, NV 89521</td>
</tr>
<tr>
<td>TELEPHONE NO.</td>
<td>(775) 824 7600 (Monday – Friday 8:00 am PST – 5:00 pm PST)</td>
</tr>
<tr>
<td>EMERGENCY TELEPHONE NO.</td>
<td>(775) 824 7600 (Monday – Friday 8:00 am PST – 5:00 pm PST)</td>
</tr>
<tr>
<td>SDS DATE OF PREPARATION</td>
<td>May 17, 2018</td>
</tr>
</tbody>
</table>

SECTION 2: HAZARDS IDENTIFICATION

| OSHA GHS HAZARD CLASSIFICATION | Carcinogen Category 1A  
Specific Target Organ Toxicity, Repeated Exposure Category 1 |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>HAZARDS NOT OTHERWISE CLASSIFIED</td>
<td>None</td>
</tr>
</tbody>
</table>

LABEL ELEMENTS

DANGER
May cause cancer by inhalation.  
Causes damage to lungs through prolonged or repeated exposure.  
Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Do not breathe dust.  
Wear eye protection.  
If exposed or concerned: Get medical advice.  
Dispose of contents in accordance with local, state and federal regulations.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>INGREDIENT IDENTIFICATION</th>
<th>APPROXIMATE CONCENTRATION (%)</th>
<th>C.A.S. NUMBERS</th>
</tr>
</thead>
</table>
| Montmorillonite Clay, Calcined (contains 10-15% Crystalline Silica - Quartz) | 100% | 70892-59-0  
14808-60-7 |

SECTION 4: FIRST AID MEASURES

EYE
Flush eyes with generous quantities of water or eye rinse solution. Consult physician if irritation persists.

SKIN
Use moisture renewing lotions if dryness occurs.

INGESTION
Drink generous amounts of water to reduce bulk and drying effects.

INHALATION
Remove to fresh air. Blow nose to evacuate dust.

Most important symptoms/effects, acute and delayed
Dust may cause abrasive irritation to eyes. Prolonged skin contact may cause dryness. Dust may cause nose, throat and upper respiratory tract irritation. Prolonged inhalation of respirable dust containing silica may cause a progressive lung disease, silicosis and lung cancer. See Section 11 for additional information.

Indication of immediate medical attention and special treatment, if necessary
Immediate medical attention is not normally required. If dust irritates the eyes, seek medical attention.
SECTION 5: FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA
Not applicable, the material is not combustible.

SPECIFIC HAZARDS ARISING FROM THE CHEMICAL
Not applicable, the material is not combustible.

SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE-FIGHTERS
Not applicable, the material is not combustible.

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS
If dust is present, use respirator fitted with particulate filter as specified in Section 8. Protect eyes with goggles. Do not breathe dust.

ENVIRONMENTAL PRECAUTIONS
This material is not a significant environmental concern.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP
Vacuum clean spillage or wet sweep. Avoid creating airborne dust. Place in a container for use or disposal.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING
Minimize dust generation. Avoid contact with eyes. Do not breathe dust. Repair or dispose of broken bags. Observe all label precautions and warnings. Flammable or hazardous substances may retain such characteristics after absorption. Care should be taken to store and dispose of waste material in accordance with instructions of manufacturer of substance absorbed and applicable laws. Do not use with hydrofluoric acid or concentrated caustic solutions.

CONDITIONS FOR SAFE STORAGE
Store in a dry place to maintain packaging integrity and product quality. Store product separately from feed, food, pesticides and fertilizers so that cross contaminations does not occur. Do not store near hydrofluoric acid or concentrated caustic solutions.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES:
Note: Processing of sorptive clays is not covered by the OSHA Silica Standard (29CFR1910.1053) and the OSHA PEL associated with that standard.

<table>
<thead>
<tr>
<th>Component</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>MSHA PEL</th>
<th>NIOSH REL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Montmorillonite Clay, Calcined (as Particulates not otherwise classified)</td>
<td>5 mg/m³ respirable dust 15 mg/m³ total dust</td>
<td>None Established</td>
<td>5 mg/m³ respirable dust 15 mg/m³ total dust</td>
<td>None Established</td>
</tr>
<tr>
<td>Crystalline Silica (Quartz)</td>
<td>30 mg/m³ total dust 10 mg/m³ respirable dust</td>
<td>0.025 mg/m³ respirable dust total dust</td>
<td>30 mg/m³ % SiO₂+2 10 mg/m³ % SiO₂+2 respirable dust</td>
<td>0.05 mg/m³ respirable dust</td>
</tr>
</tbody>
</table>

ENGINEERING CONTROLS
Use general or local exhaust ventilation to control dust within recommended exposure limits. Refer to ACGIH publication "Industrial Ventilation" or similar publications for design of ventilation systems.

PERSONAL PROTECTIVE EQUIPMENT:

EYE / FACE PROTECTION
Goggles to protect from dust

SKIN PROTECTION
No special equipment is needed.

RESPIRATORY PROTECTION
Respirators fitted with filters certified to standard 42CFR64 under series N95 should be worn when dust is present. If the dust concentration is less than ten (10) times the Permissible Exposure Limit (PEL) use a quarter or half-mask respirator with a N95 dust filter or a single use dust mask rated N95. If dust concentration is greater than ten (10) times and less than fifty (50) times the PEL, a full-face piece respirator fitted with replaceable N95 filters is recommended. If dust concentration is greater than fifty (50) and less than two hundred (200) times the PEL use a power air-purifying (positive pressure) respirator with a replaceable N95 filter. If dust concentration is greater than two hundred (200) times the PEL use a type C, supplied air respirator (continuous flow, positive pressure), with full face piece, hood or helmet.

GENERAL HYGIENE
Avoid breathing dust. Avoid contact with eyes. Wash hands after handling and before eating or drinking.
## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance, Color</td>
<td>Reddish Brown granules</td>
</tr>
<tr>
<td>Odor</td>
<td>Odorless</td>
</tr>
<tr>
<td>Physical State</td>
<td>Solid</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Melting Point</td>
<td>Unknown</td>
</tr>
<tr>
<td>Flash Point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>pH (10% Suspension)</td>
<td>Unknown</td>
</tr>
<tr>
<td>Flammability Limits</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>Unknown</td>
</tr>
<tr>
<td>Specific Gravity / Relative Density</td>
<td>2.2</td>
</tr>
<tr>
<td>Autoignition Temperature</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Partition Coefficient – n-Octanol/Water</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flammability (solid/gas)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Solubility – Water</td>
<td>&lt; 2%</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

## SECTION 10: STABILITY AND REACTIVITY

<table>
<thead>
<tr>
<th>Reactivity</th>
<th>Material is not reactive.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical Stability</td>
<td>Material is stable.</td>
</tr>
<tr>
<td>Possibility of Hazardous Reactions</td>
<td>Material is not reactive under normal conditions of handling unless mixed with incompatible substances below.</td>
</tr>
<tr>
<td>Conditions to Avoid</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Incompatible Materials</td>
<td>Unsaturated organic compounds, such as turpentine and vegetable oil, hydrofluoric acid and concentrated caustic solutions may react violently with the product.</td>
</tr>
<tr>
<td>Hazardous Decomposition Products</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

## SECTION 11: TOXICOLOGICAL INFORMATION

### Potential Health Effects

#### Likely Routes of Exposure

- **Eye**: May cause irritation (tear formation and redness) if dust gets in eyes.
- **Skin**: Not absorbed by the skin, but may cause dryness if prolonged exposure.
- **Ingestion**: Ingestion of small quantities is not considered harmful, but may cause irritation of the mouth, throat and stomach.
- **Inhalation**: Acute inhalation can cause dryness of the nasal passage and lung congestion, coughing and general throat irritation. Acute inhalation of high concentrations of respirable crystalline silica may cause acute silicosis.
- **Chronic Effects**: This product contains naturally occurring crystalline silica. Respirable crystalline silica may cause lung cancer and lung disease (silicosis) if inhaled for prolonged periods. Symptoms of silicosis include wheezing, cough and shortness of breath.

### Carcinogenicity

- **NTP**: Respirable crystalline silica (quartz) is classified as a known human carcinogen.
- **IARC**: Respirable crystalline silica (quartz) is classified as a known human carcinogen.

### Numerical Measures of Toxicity

No data available
MATERIAL NAME: Marbet 816 Mule Mix Conditioner

CORROSIVENESS, SENSITIZATION, IRRITANCY: Not applicable

REPRODUCTIVE TOXICITY: Not available

TERATOGENICITY, MUTAGENICITY: Not available

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY: No toxicity is expected

PERSISTENCE AND DEGRADABILITY: Non-biodegradable, inert.

BIOACCUMULATIVE POTENTIAL: Little potential for bioaccumulation

MOBILITY IN SOIL: No mobility

OTHER ADVERSE EFFECTS: None known

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: If this material as supplied becomes a waste, use solid waste disposal common to landfill type operations or in slurry to sumps. Not considered a hazardous waste under RCRA (40CFR Part 261).

PACKAGING DISPOSAL: Dispose of in accordance with applicable laws and regulations, typically solid waste disposal common to landfill type operations.

SECTION 14: TRANSPORT INFORMATION

BASIC SHIPPING INFORMATION: DOT shipping classification 55 (no restrictions). Technical name is “Calcined Clay”.

ADDITIONAL INFORMATION: No special requirements or placarding necessary.

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL:

TSCA: Montmorillonite and Quartz appear on the EPA TSCA inventory list.

CERCLA: Montmorillonite is not classified as a hazardous substance under regulations of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), 40 CFR 302.

SARA TITLE III: Not listed.

California Proposition 65: 🚸WARNING: This product can expose you to crystalline silica, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

SECTION 16: OTHER INFORMATION

NFPA

HMS

0* Health
0 Flammability
0 Reactivity
E Protective Equipment

ORIGINAL ISSUE DATE: January 14, 2014

REVISION DATE: May 17, 2018

REVISION NO.: 3

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