1 PRODUCT AND COMPANY IDENTIFICATION

Manufacturer
Dan's Whetstone Co., Inc.
418 Hilltop Road
Pearcy, AR 71964

Contact: Dan's Whetstone Co., Inc.
Phone: (501) 767-1616
Fax: (501) 767-9598
Web: www.danswhetstone.com

Product Name: Arkansas Whetstones
Revision Date: 12/12/2016
Version: 1
SDS Number: 763
Common Name: Crystalline Silica
CAS Number: MIXTURE
Chemical Family: Mineral
Chemical Formula: SiO2
Synonyms: Silicon Dioxide, Tripoli, Quartz, Crystalline Silica, Novaculite (All Grades)
Product Use: Sharpening Stone
Emergency Phone: (501) 767-1616

2 HAZARDS IDENTIFICATION

NFPA: Health = 0, Fire = 0, Reactivity = 0
HMIS III: H*0/F0/P0

<table>
<thead>
<tr>
<th>NFPA</th>
<th>HMIS III</th>
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PERSONAL PROTECTION INDEX

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<td>B</td>
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<td>F</td>
<td>L</td>
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</tbody>
</table>

Consult your supervisor or S.O.P. for "SPECIAL" handling directions.

PERSONAL PROTECTION

E | Safety Glasses, Gloves, Dust Respirator
GHS Signal Word:
WARNING

GHS Hazard Pictograms:

GHS Classifications:
- Health, Carcinogenicity, 2
- Health, Specific target organ toxicity - Repeated exposure, 2

GHS Phrases:
- H351 - Suspected of causing cancer
- H373 - May cause damage to organs through prolonged or repeated exposure

GHS Precautionary Statements:
- P260 - Do not breathe dust.
- P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P305+351+338 - IF IN EYES: DO NOT RUB. Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
- P337+313 - If eye irritation persists: Get medical advice/attention.
- P501 - Dispose of contents/container to an approved waste disposal plant.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients:

<table>
<thead>
<tr>
<th>Cas #</th>
<th>Percentage</th>
<th>Chemical Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>14808-60-7</td>
<td>100%</td>
<td>Silica, crystalline quartz</td>
</tr>
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</table>

*Balance of ingredients are non-hazardous, as defined by OSHA 29CFR1910.1200 or the Globally Harmonized System of Classification and Labeling of Chemicals (GHS), or hazardous in less than 1% concentration (or 0.1% for carcinogens, reproductive toxins, or respiratory/skin sensitizers).

4 FIRST AID MEASURES

Inhalation: Not an expected route of exposure. If small particles or dusts are inhaled, blow nose to remove substance from nasal passages. Give oxygen or artificial respiration if needed. If symptoms develop, move victim to fresh air. If symptoms persist, obtain medical attention.

Skin Contact: This product is not expected to irritate the skin. If small particles or dusts are exposed to skin, promptly flush skin with water for at least 15 minutes to ensure all chemical is removed. If reddening and/or a rash develops and/or persists, obtain medical attention.

Eye Contact: This product is not expected to irritate the eyes. If small particles or dusts are exposed to eyes, do NOT rub eyes. Flush with large amounts of water for at least 15 minutes, lifting upper and lower lids occasionally. If irritation persists, obtain medical attention.

Ingestion: Not an expected route of exposure. If symptoms develop, obtain medical attention. Do NOT induce vomiting unless instructed to do so by medical personnel.
Most important symptoms and effects, both acute and delayed:
The most important known symptoms and effects are described in the labelling (see Section 2) and/or Section 11. This product is not expected to be used in a form that will create crystalline silica dust. Prolonged inhalation of crystalline silica dust may result in silicosis. Silicosis is a disabling pulmonary fibrosis characterized by fibrotic changes and miliary nodules in the lungs and may be accompanied by a dry cough, shortness of breath, emphysema, decreased chest expansion, and increased susceptibility to tuberculosis. In advanced stages, loss of appetite, pleuritic pain, and total incapacity to work may occur. Advanced silicosis may result in death due to cardiac failure or destruction of lung tissue. Crystalline silica is classified as Group 1 “Known to be carcinogenic to humans” by the IARC and “Sufficient evidence” of carcinogenicity by the NTP. The chronic health risks are associated with respiring particles of 3-4 microns over protracted periods of time. Currently, there is a limited understanding of the mechanisms of crystalline silica toxicity, including its mechanisms for lung carcinogenicity. Additional studies are needed to determine whether the cell transforming activity of quartz is related to its carcinogenic potential.

Indication of any immediate medical attention and special treatment needed:
No data available.

FIRE FIGHTING MEASURES

Flammability: Not flammable
Flash Point: DNA
Flash Point Method: DNA
Burning Rate: No data available
Autoignition Temp: No data available
LEL: DNA
UEL: DNA

Extinguishing Media:
Limestone does not burn. Use extinguishing media appropriate for surrounding fire conditions.

Special Hazards Arising From the Substance or Mixture:
Silicon Oxides

Advice for Firefighters:
Firefighters should wear full-face, positive-pressure respirators.

Further Information:
If incinerated, may release toxic fumes.
See Section 7 for more information on safe handling.
See Section 8 for more information on personal protection equipment.
See Section 13 for disposal information.

ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:
Use personal protective equipment, including dust respirator.
Avoid dust formation.
Avoid breathing dust.
Keep from contacting eyes.
Ensure adequate ventilation.
Environmental precautions:
Prevent further release (leakage/spillage) if safe to do so.

Methods and materials for containments and cleaning up:
Pick up and arrange disposal without creating dust.
Sweep up, shovel or collect spillage with an electrically protected vacuum cleaner.
Place contaminated material into suitable, closed containers for disposal.
Dispose of contaminated material according to Section 13.
After spillage has been collected, area may be flushed with water or wet-brushed.
Ensure adequate ventilation.

Reference to other sections:
Comply with federal, state and local regulations on reporting spills.
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for information on proper disposal.

7  HANDLING AND STORAGE

Handling Precautions:  Avoid formation of dust.
Avoid breathing dust.
Avoid contact with eyes.
Keep material away from incompatible materials.
Wash thoroughly after handling.
Ensure adequate ventilation.

Storage Requirements:  Store away from Hydrofluoric acid.

8  EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls:  All ventilation should be designed in accordance with OSHA standard (29 CFR 1910.94). Use local exhaust at filling zones and where leakage and dust formation is probable. Use mechanical (general) ventilation for storage areas. Use appropriate ventilation as required to keep Exposure Limits in Air below TLV & PEL limits.

Personal Protective Equip:  Eye/face protection:
Use safety glasses, gloves and dust respirator according to HMIS PP, E. All safety equipment should be tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Skin protection:
Handle with gloves made from water-impermeable materials. Barrier creams should not be used in place of gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact. Dispose of contaminated gloves according to applicable laws and laboratory practices.

Body Protection:
Chemically resistant gloves and safety glasses are recommended. Type of protective equipment should be selected based on concentration amount and conditions of use of this material.

Respiratory protection:
Use of a dust respirator is highly recommended. A full-face dust/vapor respirator may be
required as backup to engineering controls when proper engineering controls are not in place to keep TLV and PEL limits below defined thresholds. All respiratory equipment must either be NIOSH/MSHA-approved (under 30 CFR 11) or NIOSH-approved (under 42 CFR 84).

Control of environmental exposure:
Prevent leakage or spillage if safe to do so. Do not let material enter drains.

Components with workplace control parameters:

Component(s): Silica, crystalline quartz
CAS No(s): 14808-60-7
USA OSHA (TWA/PEL, General Industry): 30 mg/m³ (%SiO₂+2, Total Dust, 8 hours)
USA OSHA (TWA/PEL, General Industry): 10 mg/m³ (%SiO₂+2, Respirable Fraction, 8 hours)
USA OSHA (TWA/PEL, General Industry): 250 mppcf* (%SiO₂+5)
USA OSHA (TWA/PEL, Construction Industry): 250 mppcf* (%SiO₂+5)
USA OSHA (TWA/PEL, Shipyard Employment): 250 mppcf* (%SiO₂+5)
USA ACGIH (TWA/TLV): 0.025 mg/m³
USA NIOSH (TWA/REL): 0.050 mg/m³
Cal/OSHA (TWA/PEL): 0.10 mg/m³

*mppcf = Millions of particles per cubic foot of air

Biological occupational exposure limits:
Contains no substances with biological occupational exposure limits values.

### PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>White to Light Gray Fine Grained Sand</td>
</tr>
<tr>
<td>Odor</td>
<td>Odorless</td>
</tr>
<tr>
<td>Molecular Formula</td>
<td>SiO₂</td>
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<tr>
<td>Solubility</td>
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<tr>
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<tr>
<td>Percent Volatile</td>
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<tr>
<td>Heat Value</td>
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<tr>
<td>Freezing/Melting Pt.</td>
<td>1,610 °C (2,930 °F)</td>
</tr>
<tr>
<td>Flash Point</td>
<td>DNA</td>
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<tr>
<td>Octanol</td>
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<tr>
<td>VOC</td>
<td>0 g/l</td>
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<tr>
<td>Bulk Density</td>
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</tr>
<tr>
<td>Auto-Ignition Temp</td>
<td>Not determined</td>
</tr>
<tr>
<td>UFL/LFL</td>
<td>DNA</td>
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</table>

### STABILITY AND REACTIVITY

Stability: Product is stable under normal conditions.
Conditions to Avoid: Incompatibilities, flames, ignition sources.
Materials to Avoid: Hydrofluoric acid.
Hazardous Decomposition: Silicon Oxides.
Hazardous Polymerization: Will not occur.
### TOXICOLOGICAL INFORMATION

**Component(s):** Silica, crystalline quartz  
**CAS No(s):** 14808-60-7

**Acute Toxicity:** No data available.

**Skin Corrosion/Irritation:** Small particles may cause skin irritation.

**Serious Eye Damage/Eye Irritation:** Small particles cause severe eye irritation.

**Respiratory or Skin Sensitation:** No data available.

**Germ Cell Mutagenicity:** No data available.

**Carcinogenicity:** This product is or contains a component that is classifiable as to its carcinogenicity to humans based on its IARC, ACGIH, NTP or OSHA classification (Silica, crystalline quartz). Limited evidence of carcinogenicity in human studies.

- **IARC:** 1 - Group 1: Carcinogenic to humans (Silica, crystalline quartz).
- **ACGIH:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
- **NTP:** Known to be a human carcinogen (Silica, crystalline quartz).
- **OSHA:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive Toxicity:** No data available.

**Specific Target Organ Toxicity - Single Exposure:** No data available.

**Specific Target Organ Toxicity - Repeated Exposure:** Inhalation - May cause damage to organs through prolonged or repeated inhalation exposure.

**Aspiration Hazard:** No data available.

**Additional Information:** Component: Silica, crystalline quartz; RTECS: VV7330000

### ECOLOGICAL INFORMATION

**Component(s):** Silica, crystalline quartz  
**CAS No(s):** 14808-60-7

**Toxicity:**

- Toxicity to fish: No data available
- Toxicity to daphnia and other aquatic invertebrates: No data available

**Persistence and Degradability:** No data available

**Bioaccumulative Potential:** No data available

**Mobility in Soil:** No data available
Results of PBT and vPvB assessment: Not required/conducted

Other Adverse Effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. This material does not have any recognizable toxicity to plants or animals.

### DISPOSAL CONSIDERATIONS

Product: Hazardous wastes shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution, release into the environment or damage to people and animals. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated Packaging: Dispose of as unused product.

### TRANSPORT INFORMATION

**DOT (US)**
Non-regulated material, solid

**IMDG**
Non-regulated material, solid

**IATA**
Non-regulated material, solid

### REGULATORY INFORMATION

**COMPONENT / (CAS/PERC) / CODES**

*Silica, crystalline quartz (14808607 0.1-1%) MASS, NJHS, NRC, OSHAWAC, PA, PROP65, SARA311/312, TSCA, TXAIR

**REGULATORY KEY DESCRIPTIONS**

MASS = MA Massachusetts Hazardous Substances List
NJHS = New Jersey Right to Know Hazardous Substances
NRC = Nationally Recognized Carcinogens
OSHA Workplace Air Contaminants
PA = PA Right-To-Know List of Hazardous Substances
PROP65 = CA Prop 65
SARA311/312 = SARA 311/312 Toxic Chemicals
TSCA = Toxic Substances Control Act
TXAIR = TX Air Contaminants with Health Effects Screening Level
Disclaimer:

The data in this Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material in any process. The information set forth herein is furnished free of charge and is based on technical data that Dan's Whetstone Co., Inc. believes to be reliable. It is intended for use by persons having technical skill and at their own discretion and risk. Since conditions of use are outside of Dan's Whetstone Co., Inc.’s control, Dan's Whetstone Co., Inc. makes no warranties, expressed or implied, and assumes no liability in connection with any use of this information. Nothing herein is to be taken as a license to operate under, or a recommendation to infringe upon, any patents.

Preparation Information:

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