

Safety Data Sheet



Section 1: Identification

Product identifier

- Product Name** • **FourStar Bti Briquets Sustained Release 45 Day Microbial Briquets; FourStar Bti Briquets Sustained Release 150 Day Microbial Briquets**
- Synonyms** • 100519560; 100519561; EPA Reg. No.: 83362-2; FourStar Bti Catch Basin Briquets 150; FourStar Bti Catch Basin Briquets 45; FourStar® Bti Briquets; FourStar® Bti Briquets 150; FourStar® Bti Briquets 45; Meridian-02
- Product Description** • Solid, light tan briquette.
- Relevant identified uses of the substance or mixture and uses advised against**
- Recommended use** • Microbial insecticide effective against mosquitoes in a variety of habitats.
- Restrictions on use** • Do not apply directly to treated, finished drinking water reservoirs or drinking water receptacles when the water is intended for human consumption. Avoid contact with eyes and skin. Keep out of reach of children.

Details of the supplier of the safety data sheet

- Manufacturer** • B2E Microbials, LLC DBA FourStar Microbials, LLC
1501 E. Woodfield Road, Suite 200W
Schaumburg, IL 60173
United States
www.fourstarmicrobials.com

Emergency telephone number

- Manufacturer (Transportation)** • 1-800-424-9300 - CHEMTREC
- Manufacturer (Transportation)** • 1-703-527-3887 - CHEMTREC - Outside US Collect Calls Accepted
- Manufacturer** • 1-800-248-7763

Section 2: Hazard Identification

United States (US)

According to: OSHA 29 CFR 1910.1200 HCS

Classification of the substance or mixture

- OSHA HCS 2012** • Skin Sensitization 1
Carcinogenicity 1A

Label elements

OSHA HCS 2012

DANGER



- Hazard statements** • May cause an allergic skin reaction
May cause cancer.

Precautionary statements

- Prevention** • Wear protective gloves/protective clothing/eye protection/face protection.
Avoid breathing dust, fume, gas, mist, vapors and/or spray.
Contaminated work clothing should not be allowed out of the workplace.
Do not handle until all safety precautions have been read and understood.
Obtain special instructions before use.

- Response** • If skin irritation or rash occurs: Get medical advice/attention.
Specific treatment, see supplemental first aid information.
Wash contaminated clothing before reuse.
IF exposed or concerned: Get medical advice/attention.
IF ON SKIN: Wash with plenty of soap and water.

- Storage/Disposal** • Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.
Store locked up.

- Supplemental information** • The finished product is not considered carcinogenic because of the product's physical form. The Hazard Statement "May Cause Cancer" is presented because a component of this product contains a naturally occurring trace amount of crystalline silica (quartz) which is classified as carcinogenic to humans if inhaled. Respiratory exposure to silica dust from the finished product is not expected to occur under normal conditions of use due to the manner in which the constituents are bound. The crystalline silica in the finished product is unlikely to pose personal exposure via inhalation.

Other hazards

OSHA HCS 2012

- Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

Section 3 - Composition/Information on Ingredients

Substances

- Material does not meet the criteria of a substance according to United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS)

Mixtures

| Composition | | |
|---|----------------|------------|
| Chemical Name | Identifiers | % |
| Bacillus thuringiensis ssp. israelensis | CAS:68038-71-1 | 7% |
| Plaster of paris | CAS:26499-65-0 | 73% |
| Silica, crystalline - quartz | CAS:14808-60-7 | < 1% |
| Other ingredients | NDA | 19% TO 20% |

Section 4: First-Aid Measures

Description of first aid measures

- Inhalation**
- IF INHALED: If breathing is difficult, remove person to fresh air and keep at rest in a position comfortable for breathing. Call a poison control center or doctor for further treatment advice.
- Skin**
- IF ON SKIN: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
- Eye**
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison control center or doctor for treatment advice.
- Ingestion**
- First aid is not expected to be necessary if material is used under ordinary conditions and as recommended.

Most important symptoms and effects, both acute and delayed

- May cause an allergic skin reaction in individuals with a sensitivity to *Bacillus thuringiensis* ssp. *israelensis*, may cause cancer. Refer to Section 11 - Toxicological Information.

Indication of any immediate medical attention and special treatment needed

- Notes to Physician**
- Treat symptomatically and supportively.

Section 5: Fire-Fighting Measures

Extinguishing media

- Suitable Extinguishing Media**
- LARGE FIRE: Water spray, fog or regular foam.
 - SMALL FIRES: Dry chemical, CO2, water spray or regular foam.

- Unsuitable Extinguishing Media**
- No data available.

Special hazards arising from the substance or mixture

- Unusual Fire and Explosion Hazards**
- Material is non-combustible and is not expected to pose a fire or explosion hazard.

- Hazardous Combustion Products**
- No data available.

Advice for firefighters

- Fire fighters should wear complete protective clothing including self-contained breathing apparatus.

Section 6 - Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

- Personal Precautions**
- Avoid contact with skin, eyes, and clothing. Wear appropriate personal protective equipment, avoid direct contact. Remove clothing and wash thoroughly before use.

- Emergency Procedures**
- Use normal clean up procedures.

Environmental precautions

- Follow best practice for site management and disposal of waste.

Methods and material for containment and cleaning up

- Containment/Clean-up Measures**
- Use appropriate Personal Protective Equipment (PPE). Carefully shovel or sweep up spilled material and place in suitable container.

Section 7 - Handling and Storage

Precautions for safe handling

- Handling**
- Use good safety and industrial hygiene practices. Avoid contact with skin and eyes.

Conditions for safe storage, including any incompatibilities

- Storage**
- Store closed containers in a cool dry place. Do not contaminate water, food or feed by storage or disposal.

Section 8 - Exposure Controls/Personal Protection

Control parameters

| Exposure Limits/Guidelines | | | | |
|---|--------|---|--|--|
| | Result | ACGIH | NIOSH | OSHA |
| Silica, crystalline - quartz (14808-60-7) | TWAs | 0.025 mg/m ³ TWA (respirable fraction) | 0.05 mg/m ³ TWA (respirable dust) | See below |
| Plaster of paris (26499-65-0) | TWAs | Not established | 10 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable dust) | 15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction) |

Exposure Limits Supplemental

OSHA

- Silica, crystalline - quartz (14808-60-7): **Mineral Dusts:** ((30)/(%SiO₂ + 2) mg/m³ TWA, total dust; (250)/(%SiO₂ + 5) mppcf TWA, respirable fraction; (10)/(%SiO₂ + 2) mg/m³ TWA, respirable fraction)

ACGIH

- Silica, crystalline - quartz (14808-60-7): **TLV Basis - Critical Effects:** (lung cancer; pulmonary fibrosis)

Exposure controls

Engineering Measures/Controls

- No data available.

Personal Protective Equipment

Pictograms



Respiratory

- None specified.

Eye/Face

- Wear safety glasses.

Hands

- Wear appropriate gloves.

Skin/Body

- If prolonged exposure is anticipated, it is recommended for handlers to wear appropriate clothing to prevent skin contact.

Environmental Exposure Controls

- Refer to Section 13 - Disposal Considerations.

Section 9 - Physical and Chemical Properties

Information on Physical and Chemical Properties

| Material Description | | | |
|-----------------------------------|-------------------|------------------------------|--------------------|
| Physical Form | Solid | Appearance/Description | Solid briquette. |
| Color | Light tan. | Odor | No data available. |
| Odor Threshold | No data available | | |
| General Properties | | | |
| Boiling Point | No data available | Melting Point/Freezing Point | No data available |
| Decomposition Temperature | No data available | pH | Not relevant |
| Specific Gravity/Relative Density | = 0.82 Water=1 | Bulk Density | No data available |
| Water Solubility | Slightly soluble | Viscosity | Not relevant |

Volatility

| | | | |
|------------------|-------------------|---------------|-------------------|
| Vapor Pressure | No data available | Vapor Density | No data available |
| Evaporation Rate | No data available | | |

Flammability

| | | | |
|---------------------------|-------------------|--------------|-------------------|
| Flash Point | Not relevant | UEL | No data available |
| LEL | No data available | Autoignition | No data available |
| Flammability (solid, gas) | Not Flammable. | | |

Environmental

| | | | |
|-------------------------------------|-------------------|--|--|
| Octanol/Water Partition coefficient | No data available | | |
|-------------------------------------|-------------------|--|--|

Section 10: Stability and Reactivity**Reactivity**

- Non-reactive

Chemical stability

- Stable

Possibility of hazardous reactions

- Hazardous polymerization will not occur.

Conditions to avoid

- No data available.

Incompatible materials

- No data available.

Hazardous decomposition products

- No data available.

Section 11 - Toxicological Information**Information on toxicological effects**

| Components | | |
|--|------------|---|
| Bacillus thuringiensis ssp. israelensis (7%) | 68038-71-1 | Acute Toxicity: Ingestion/Oral-Rat LD50 • 5000 mg/kg; Inhalation-Rat LC50 • 2.04 mg/L 4 Hour (s); Skin-Rabbit LD50 • 5000 mg/kg; Irritation: Eye-Rabbit • Mild irritation; Skin-Rabbit • Mild irritation |

| GHS Properties | Classification |
|-------------------------------|---|
| Respiratory sensitization | OSHA HCS 2012 • Classification criteria not met |
| Serious eye damage/Irritation | OSHA HCS 2012 • Classification criteria not met |
| Acute toxicity | OSHA HCS 2012 • Acute Toxicity - Dermal - Classification criteria not met; Acute Toxicity - Inhalation - Classification criteria not met; Acute Toxicity - Oral - Classification criteria not met |
| Aspiration Hazard | OSHA HCS 2012 • Classification criteria not met |
| Carcinogenicity | OSHA HCS 2012 • Carcinogenicity 1A |
| Skin corrosion/Irritation | OSHA HCS 2012 • Classification criteria not met |
| Skin sensitization | OSHA HCS 2012 • Skin Sensitizer 1 |

| | |
|----------------------------------|---|
| STOT-RE | OSHA HCS 2012 • Classification criteria not met |
| STOT-SE | OSHA HCS 2012 • Classification criteria not met |
| Toxicity for Reproduction | OSHA HCS 2012 • Classification criteria not met |
| Germ Cell Mutagenicity | OSHA HCS 2012 • Classification criteria not met |

Route(s) of entry/exposure • Inhalation, skin or eye contact, and ingestion.

Potential Health Effects

Inhalation

- Acute (Immediate)** • Under normal conditions of use, no health effects are expected.
- Chronic (Delayed)** • Exposure to respirable crystalline silica is not expected during normal use of this product. However, prolonged overexposure to respirable crystalline silica may cause lung disease (silicosis).

Skin

- Acute (Immediate)** • May cause an allergic reaction in individuals with a sensitivity to *Bacillus thuringiensis* ssp. *israelensis*.
- Chronic (Delayed)** • No data available

Eye

- Acute (Immediate)** • May cause moderate irritation.
- Chronic (Delayed)** • No data available.

Ingestion

- Acute (Immediate)** • Under normal conditions of use, no health effects are expected.
- Chronic (Delayed)** • No data available

Other

- Chronic (Delayed)** • No data available.

Carcinogenic Effects

- Exposure to respirable crystalline silica dust from the finished product is not expected to occur due to the manner in which the constituents are bound, thus the finished product is not considered carcinogenic under conditions of normal use.

Section 12 - Ecological Information

Toxicity

- No data available

Persistence and degradability

- No data available.

Bioaccumulative potential

- No data available.

Mobility in Soil

- No data available.

Other adverse effects

Potential Environmental Effects

- Do not contaminate water when disposing or equipment washwaters or rinsate. Do not apply to treated, finished drinking water reservoirs or drinking water receptacles when the water is intended for human consumption.

Section 13 - Disposal Considerations

Waste treatment methods

- Product waste**
- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations. Do not contaminate water, food, or feed by storage or disposal.
- Packaging waste**
- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations. Nonrefillable container. Do not reuse or refill empty carton or packaging material. Offer for recycling, if available or crush and discard carton in a sanitary landfill or by incineration, or if allowed by state and local authorities, by burning. Do not breathe smoke if burned.

Section 14 - Transport Information

| | UN number | UN proper shipping name | Transport hazard class (es) | Packing group | Environmental hazards |
|-----------|----------------|-------------------------|-----------------------------|----------------|-----------------------|
| DOT | Not Applicable | Not Regulated | Not Applicable | Not Applicable | Not Applicable |
| IMO/IMDG | Not Applicable | Not Regulated | Not Applicable | Not Applicable | Not Applicable |
| IATA/ICAO | Not Applicable | Not Regulated | Not Applicable | Not Applicable | Not Applicable |

Special precautions for user • None specified.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code • No data available

Other information

IMO/IMDG • No data available

IATA/ICAO • No data available

Key to abbreviations

= N/A = Not applicable.

Section 15 - Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA Hazard Classifications • Acute, Chronic

FIFRA – Pesticide Labeling

This is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

CAUTION

Hazard Statements • Keep out of reach of children.

Precautionary Statements •

Hazards to Humans and Domestic Animals • Hazards to Humans and Domestic Animals: Harmful if inhaled. Causes moderate eye irritation. Avoid contact with eyes or clothing. Avoid contact with skin, eyes or clothing. Avoid breathing dust. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco. Remove and wash contaminated clothing before reuse.

First Aid • IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth to mouth if possible. Call poison control center or doctor for treatment advice.
IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes.

Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
 IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

Environmental Hazards • Do not apply to treated, finish drinking water reservoirs or drinking water receptacles when the water is intended for human consumption.
 Do not contaminate water when disposing of equipment wash waters.

| Inventory | | |
|---|------------|------|
| Component | CAS | TSCA |
| Bacillus thuringiensis ssp. israelensis | 68038-71-1 | Yes |
| Plaster of paris | 26499-65-0 | No |
| Silica, crystalline - quartz | 14808-60-7 | Yes |

Section 16 - Other Information

- Revision Date** • 11/August/2015
- Last Revision Date** • 11/August/2015
- Preparation Date** • 11/August/2015
- Disclaimer/Statement of Liability** • The information and statements herein are believed to be reliable but are not to be construed as a warranty or representation for which we assume legal responsibility. Users should undertake sufficient verification and testing to determine the suitability for their own particular purpose of any information or products referred to herein. NO WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE IS MADE.