**SAFETY DATA SHEET**

**SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

1.1 Product identifier

**Product Name**
BRITESORB® D300 Beer Stabilizer

**Alternative names**
Beer Stabilizer
FOOD GRADE silicon dioxide powder

**CAS No.**
112926-00-8

**EINECS No.**
231-545-4

**REACH Registration No.**
01-2119379499-16-0050

1.2 Relevant identified uses of the substance or mixture and uses advised against

**Identified use(s)**
Beverage processing.
Adsortent or absorbent; Process regulator or aid

**Uses advised against**
None known.

1.3 Details of the supplier of the safety data sheet

**Company Identification**
PQ Corporation
P.O. Box 840
Valley Forge
PA 19482
USA

**Telephone:** +1 610-651-4200

**E-Mail (competent person):** sds.uk@pqcorp.com

1.4 Emergency telephone number

**Emergency Phone No.** +1 800-424-9300

**SECTION 2: HAZARDS IDENTIFICATION**

2.1 Classification of the substance or mixture

**GHS Classification**
Not classified as dangerous for supply/use.

**EC Classification**
Not classified as dangerous for supply/use.

**Hazard summary**
Exposure to any kind of dust is potentially harmful.

2.2 Label elements

**Hazard pictogram(s)**

**Signal word(s)**
None.

**Hazard statement(s)**
None.

**Precautionary statement(s)**
None.

**EC Classification**
Not classified as dangerous for supply/use.

**Hazard Symbol**

**Risk Phrases**
None

**Safety Phrases**
Handle in accordance with good industrial hygiene and safety practices.
Avoid inhalation of dusts.

Revision: GHS
Date of Issue: 03/2015
Date Previous Issue: 8/1/08
2.3 OTHER HAZARDS

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Regulation (EC) No. 1272/2008 (CLP)

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>%W/W</th>
<th>CAS No.</th>
<th>EINECS No. / REACH Registration</th>
<th>Hazard symbol(s) and hazard statement(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synthetic amorphous</td>
<td>~95</td>
<td>112926-00-8</td>
<td>231-545-4</td>
<td>Not classified</td>
</tr>
<tr>
<td>silica</td>
<td></td>
<td></td>
<td>01-2119379499-16</td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td>~5</td>
<td>7732-18-5</td>
<td>231-791-2</td>
<td></td>
</tr>
</tbody>
</table>

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Eye Contact: If substance has got into the eyes, immediately wash out with plenty of water. Obtain immediate medical attention.

Skin Contact: Wash affected skin with plenty of water. If symptoms develop, obtain medical attention.

Inhalation: Remove patient from exposure, keep warm and at rest. If symptoms develop, obtain medical attention.

Ingestion: Do not induce vomiting. Wash out mouth with water. If large amount swallowed or symptoms develop obtain medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Exposure to any kind of dust is potentially harmful.

4.3 Indication of any immediate medical attention and special treatment needed

See Section: 4.1

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing Media: Compatible with all standard fire fighting techniques.

Unsuitable extinguishing Media: None known.

5.2 Special hazards arising from the substance or mixture

Not applicable. Inorganic powder or granules. Non-combustible.

5.3 Advice for fire-fighters

None.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear suitable protective clothing. Wear eye/face protection. An approved dust mask should be worn if dust is generated during handling.

6.2 Environmental precautions

Synthetic amorphous silica is virtually inert and has no known adverse effect on the environment.

6.3 Methods and materials for containment and cleaning up

Contain spillages. Dampening with water can reduce dust. Sweep or preferably vacuum up and collect in suitable containers for recovery or disposal.

6.4 Reference to other sections

See Also Section 8.

SECTION 7: HANDLING AND STORAGE
7.1 Precautions for safe handling
Avoid generation of dust. A considerable static electrical charge can be built up during mechanical handling which may become a hazard in atmospheres containing flammable vapours. Advice on the control of static is given in British Standard BS 5958. Advice on the control of static is given in British Standard BS 5958. See Also Section 8.

7.2 Conditions for safe storage, including any incompatibilities
Keep container tightly closed and dry.

7.3 Specific end use(s)
See also Annex to the extended Safety Data Sheet.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

<table>
<thead>
<tr>
<th>SUBSTANCE.</th>
<th>Occupational Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synthetic amorphous silica</td>
<td>UK EH40: Silica amorphous Total inhalable dust: WEL 6 mg/m3 8h TWA. Respirable dust: WEL 2.4 mg/m3 8h TWA. US ACGIH: Silica, Amorphous - Precipitated silica and silica gel: TLV withdrawn 2006 US OSHA: Silica amorphous - Precipitated silica: PEL 6mg/m3 8h TWA</td>
</tr>
</tbody>
</table>

8.2 Exposure controls
Wear protective equipment to comply with good occupational hygiene practice. Do not eat, drink or smoke at the work place.

8.2.1 Appropriate engineering controls
Engineering methods to prevent or control exposure are preferred. Methods include process or personnel enclosure, mechanical ventilation (dilution and local exhaust), and control of process conditions.

8.2.2 Personal Protection

Respiratory protection
Avoid inhalation of dusts. Wear suitable respiratory protective equipment if working in confined spaces with inadequate ventilation or where there is any risk of the exposure limits being exceeded. Advice on respiratory protective equipment is given in the HSE (Health and Safety Executive) publication HS(G)53.

Eye/face protection
Safety spectacles. Eye protection with side protection (EN 166).

Skin protection
Wear suitable protective clothing and gloves. Plastic or rubber gloves. For example EN374-3. Wear suitable overalls.

8.2.3 Environmental Exposure Controls
Avoid generation of dust.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Powder. White.</td>
</tr>
<tr>
<td>Odour</td>
<td>Odourless.</td>
</tr>
<tr>
<td>Odour Threshold (ppm)</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>pH (Value)</td>
<td>2 - 3.5 at 10% w/w in water.</td>
</tr>
<tr>
<td>Freezing Point (°C)</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Melting Point (°C)</td>
<td>&gt; 1000</td>
</tr>
<tr>
<td>Boiling Point (°C)</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Flash Point (°C) [Closed cup]</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Explosive Limit Ranges</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Vapour Pressure (mm Hg)</td>
<td>Not applicable.</td>
</tr>
</tbody>
</table>
### SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity  
See Section: 10.3

10.2 Chemical stability  
This product is hygroscopic.

10.3 Possibility of hazardous reactions  
None known.

10.4 Conditions to avoid  
See Section: 10.3

10.5 Incompatible materials  
See Section: 10.3

10.6 Hazardous decomposition product(s)  
None known.

### SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

**Acute toxicity**
- **Ingestion**  
The lethal dose for humans for synthetic amorphous silica is estimated at over 15000 mg/kg bw. Synthetic amorphous silica is a permitted food additive in the UK, US and many other countries. Oral LD50 (rat) >3100 mg/kg bw

- **Inhalation**  
Synthetic amorphous silica has little adverse effect on lungs and does not produce significant disease or toxic effect when exposure is kept below the permitted limits. However, existing medical conditions (eg. asthma, bronchitis) may be aggravated by exposure to dust. Effects of dust may be greater, and occur at lower levels of exposure in smokers compared to non-smokers.

- **Skin Contact**  
Dust may have a drying effect on the skin. Dermal LD50 (rabbit) >5000 mg/kg bw

- **Eye Contact**  
Dust may cause discomfort and mild irritation.

- **Skin corrosion/irritation**  
Non-irritant. Dust may have a drying effect on the skin.

- **Serious eye damage/irritation**  
Non-irritant.

- **Sensitisation**  
Not sensitising.

- **Mutagenicity**  
No evidence of genotoxicity. In vitro/in vivo negative.

- **Carcinogenicity**  
IARC assessment: Amorphous silica is not classifiable as to its carcinogenicity to humans (Group 3).

- **Reproductive toxicity**  
No evidence of reproductive toxicity or developmental toxicity.

- **STOT - single exposure**  
Not classified

- **STOT - repeated exposure**  
Not classified. NOAEL oral (rat) >4000 mg/kg bw/d

- **Aspiration hazard**  
Not classified

- **Other information**  
Not applicable

### SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity  
Synthetic amorphous silica is virtually inert and has no known adverse effect on the environment.
- **Fish (Brachydanio rerio)** LL50 (96 hour) >10000 mg/l
- **Aquatic invertebrates: (Daphnia magna)** EL50 (24 hour) >10000 mg/l
12.2 Persistence and degradability  
Inorganic.

12.3 Bioaccumulative potential  
Inorganic. The substance has no potential for bioaccumulation.

12.4 Mobility in soil  
Not applicable.

12.5 Results of PBT and vPvB assessment  
Not classified as PBT or vPvB.

12.6 Other adverse effects  
None.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods  
Disposal should be in accordance with local, state or national legislation. Not a hazardous waste under RCRA Sec.3001. May be disposed of by landfill in accordance with local regulations.

SECTION 14: TRANSPORT INFORMATION

14.1 UN number  
Not classified as dangerous for transport.

14.2 Proper Shipping Name  
Not applicable.

14.3 Transport hazard class(es)  
Not applicable.

14.4 Packing group  
Not applicable.

14.5 Environmental hazards  
Not applicable.

14.6 Special precautions for user  
None. No special packaging requirements.

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code  
Not applicable.

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture  
TSCA Inventory Status: Reported/Included. CAS No. 7631-86-9
AICS Inventory Status: Reported/Included.
DSL/NDSL Inventory Status: Reported/Included.
WHMIS Classification : Not classified
German Water Hazard Classification VwVwS: Product ID number 849, not hazardous to water - nwg. 1,0,0

15.2 Chemical Safety Assessment  
Information available on request.

SECTION 16: OTHER INFORMATION

Data referenced in this eSDS is from company-owned information and from data legitimately accessed by PQ Corporation through membership of Industry Consortia or other agreements. This includes data relating to toxicology, ecotoxicology, DNELs, PNECs and other information in this eSDS and its annex.

GHS Classification  
Not classified as dangerous for supply/use.

Signal word(s)  
None.

Hazard pictogram(s)  
None.

Hazard statement(s)  
None.

Precautionary statement(s)  
None.
Information contained in this publication or as otherwise supplied to Users is believed to be accurate and is given in good faith, but it is for the Users to satisfy themselves of the suitability of the product for their own particular purpose. PQ Corporation gives no warranty as to the fitness of the product for any particular purpose and any implied warranty or condition (statutory or otherwise) is excluded except to the extent that exclusion is prevented by law. PQ Corporation accepts no liability for loss or damage (other than that arising from death or personal injury caused by defective product, if proved), resulting from reliance on this information. Freedom under Patents, Copyright and Designs cannot be assumed.