The PQ Corporation

MSDS

MATERIAL SAFETY DATA SHEET

Trade Name: **BRITESORB® D300 Beer Stabilizer**

Date Prepared: **August 1, 2008**

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name:	**BRITESORB® D300 Beer Stabilizer**
Product description:	**FOOD GRADE silicon dioxide powder**
Manufacturer:	**PQ Corporation** **P. O. Box 840** **Valley Forge, PA USA** **Telephone: 610-651-4200**
In case of emergency call:	**1 610-651-4200**
For transportation emergency Call CHEMTREC:	**800-424-9300**

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical and Common Name	*CAS Registry Number*	*Wt. %*	*OSHA PEL*	*ACGIH TLV*
Amorphous Silicon dioxide; Silica gel; silica xerogel; silica, amorphous gel	**7631-86-9; 112926-00-8**	**~95%**	**20 mppcf TWA (6 mg/m^3)**	**10 mg/m^3 Total dust TWA**
Water	**7732-18-5**	**~5%**	**Not Established**	**Not Established**

3. HAZARDS IDENTIFICATION

Emergency Overview:	**White, odorless, powder. Dust causes irritation to lungs and respiratory tract. May cause eye and skin irritation. Noncombustible.**
Eye contact:	**Causes mild irritation to the eyes.**
Skin contact:	**Prolonged or repeated contact may dry skin and cause irritation.**
Inhalation:	**Dust is irritating to lungs and respiratory tract.**
Ingestion:	**No known hazards.**
Chronic hazards:	**No known chronic hazards. Not listed by NTP, IARC or OSHA as a carcinogen.**
Physical hazards:	**Spills may be slippery.**

4. FIRST AID MEASURES

Eye:	**In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation persists.**
Skin:	**In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if irritation develops or persists. Wash clothing before reuse. Thoroughly clean shoes before reuse.**
Inhalation:	**If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.**
Ingestion:	**Not applicable.**

5. FIRE FIGHTING MEASURES

Flammable limits:	**This material is noncombustible.**
Extinguishing Media:	**This material is compatible with all extinguishing media.**
Hazards to fire-fighters:	**See Section 3 for information on hazards when this material is present in the area of a fire.**
Fire-fighting equipment:	**The following protective equipment for fire fighters is recommended when this material is present in the area of a fire: chemical goggles, body-covering protective clothing, chemical resistant gloves, and rubber boots.**

6. ACCIDENTAL RELEASE MEASURES

Personal protection:	**Wear safety glasses or chemical goggles, body-covering protective clothing, loose fitting rubber gloves with separate cotton liners, NIOSH-approved dust respirator where dust occurs. See section 8.**
Environmental Hazards:	**Sinks in water. No known hazard to aquatic life, see Section 12.**
Small spill cleanup:	**Carefully shovel or sweep up spilled material and place in suitable container. Avoid generating dust. Use appropriate Personal Protective Equipment (PPE). See section 8.**
Large spill cleanup:	**Keep unnecessary people away; isolate hazard area and deny entry. Do not touch or walk through spilled material. Carefully shovel or sweep up spilled material and place in suitable container. Avoid generating dust. Use appropriate Personal Protective Equipment (PPE). See section 8. Flush contaminated area with large quantities of water. Comply with applicable environmental regulations.**
CERCLA RQ:	**There is no CERCLA Reportable Quantity for this material. If a spill goes off site, notification of state and local authorities is recommended.**

7. HANDLING AND STORAGE

Handling:	**Avoid contact with eyes, skin and clothing. Avoid breathing dust. Keep container closed. Promptly clean up spills.**
Storage:	**Keep containers closed. Store in original containers or clean and sanitary glass, stainless steel or food-contact plastic containers. Separate from nonfood chemicals. This product can absorb odors, vapors, and water from the air. In case of high humidity or storage for extended periods of time, use plastic bags to enclose product containers.**

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls:	**Use with adequate ventilation. Keep containers closed. Safety shower and eyewash fountain should be within direct access.**
Respiratory protection:	**Use a NIOSH-approved dust respirator where dust occurs. Observe OSHA regulations for respirator use (29 C.F.R. §1910.134)**
Skin protection:	**Wear body-covering protective clothing and loose fitting rubber gloves with separate cotton liners.**
Eye protection:	**Wear safety glasses or chemical goggles.**

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	**Powder.**
Color:	**White.**
Odor:	**Odorless.**
pH:	**Water dispersions are mildly alkaline pH 7.4-9.5**
Bulk density:	**Approximately 0.2-0.3g/cc (13-19lbs/ft^3).**
Solubility in water:	**Very slightly soluble. Solubility limit approximately 120 ppm at pH levels below 10**

10. STABILITY AND REACTIVITY

Stability:	**This material is stable under all conditions of use and storage.**
Conditions to avoid:	**Heating to very high temperatures (greater than 800° C) may cause conversion to more hazardous forms of silica.**
Materials to avoid:	**Chlorine trifluoride, fluorine, hydrogen fluoride, oxygen difluoride.**
Hazardous decomposition products:	**None.**

11. TOXICOLOGICAL INFORMATION

Acute Data:	**When tested for primary irritation potential, a similar material was classified as mildly irritating to the eyes and slightly irritating to the skin. Human experience indicates that prolonged or repeated skin contact may dry skin and cause irritation.** **This material has not been tested for acute inhalation. Inhalation toxicology tests for a similar silica gel resulted in a lung tissue inflammatory response.** **Acute oral toxicology studies for other similar silica gels show silica gels have a very low order of acute oral toxicity (greater than 5000 mg/kg), and at the maximum dosages tested, produce no pathological changes.**
Subchronic Data:	**Short term feeding of other similar silica gels (3 months) produced no carcinogenic or mutagenic effects.**
Special Studies:	**Mice fed up to 5% silica gel in their diets for up to 21 months, and rats fed up to 5% silica gel in their diets for up to 24 months, showed no statistically significant differences in survival rate or tumor development over controls that were fed no silica gel. Amorphous silicon dioxide is not listed by IARC, NTP or OSHA as a carcinogen.**

12. ECOLOGICAL INFORMATION

Eco toxicity:	**No data available. Silica is ubiquitous in the natural environment.**
Environmental Fate:	**Silica does not bioaccumulate except in species that use silica as a structural material such as diatoms and siliceous sponges. Where abnormally low natural silica concentrations exist (less than 0.1 ppm), dissolved silica may be a limiting nutrient for diatoms and a few other aquatic algal species. However, the addition of excess silica over the limiting concentration will not stimulate the growth of diatom populations; their growth rate is independent of silica concentration once the limiting concentration is exceeded.**
Physical/Chemical:	**Sinks in water.**

13. DISPOSAL CONSIDERATIONS

Classification:	**Disposed material is not a hazardous waste.**
Disposal Method:	**Landfill solids in accordance with federal, state and local regulations.**

14. TRANSPORT INFORMATION

DOT UN Status:	**This material is not regulated hazardous material for transportation.**

15. REGULATORY INFORMATION

CERCLA:	**No CERCLA Reportable Quantity has been established for this material.**
SARA TITLE III:	**Not an Extremely Hazardous Substance under §302. Not a Toxic Chemical under §313. Hazard Categories under §§311/312: Acute**
TSCA:	**All ingredients of this material are listed on the TSCA inventory.**
FDA:	**Silicon dioxide is authorized by FDA as a direct food additive as provided by 21 C.F.R. §§172.230, 172.480, and 173.340; as an indirect food additive as provided by 21 C.F.R. §§175.105, 177.2260, and 177.2420; and as a GRAS substance as provided by 21 C.F.R. §182.90.**

16. OTHER INFORMATION

Prepared by:	**HSES Dept / Erin A. Bendig**
Supersedes revision of:	**04/12/05**

THE INFORMATION ON THIS SAFETY DATA SHEET IS BELIEVED TO BE ACCURATE AND IT IS THE BEST INFORMATION AVAILABLE TO PQ CORPORATION THIS DOCUMENT IS INTENDED ONLY AS A GUIDE TO THE APPROPRIATE PRECAUTIONS FOR HANDLING A CHEMICAL BY A PERSON TRAINED IN CHEMICAL HANDLING. PQ CORPORATION MAKES NO WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED WITH RESPECT TO SUCH INFORMATION OR THE PRODUCT TO WHICH IT RELATES, AND WE ASSUME NO LIABILITY RESULTING FROM THE USE OR HANDLING OF THE PRODUCT TO WHICH THIS SAFETY DATA SHEET RELATES. USERS AND HANDLERS OF THIS PRODUCT SHOULD MAKE THEIR OWN INVESTIGATIONS TO DETERMINE THE SUITABILITY OF THE INFORMATION PROVIDED HEREIN FOR THEIR OWN PURPOSES.