

# SAFETY DATA SHEET

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

<b>Product Name</b>	<b>Britesorb TR</b> <b>Synthetic amorphous silica and Polyvinylpyrrolidone</b>
<b>Use</b>	Beverage processing.
<b>Manufacturer/Supplier:</b>	PQ Corporation P.O. Box 26 Warrington Cheshire United Kingdom WA5 1AB
<b>E-mail:</b>	sds.uk@pqcorp.com
<b>Telephone:</b>	+44 (0)1925 416100
<b>Fax:</b>	+44 (0)1925 416116
<b>Emergency Phone No.</b>	+44 (0)1925 416100

## 2. HAZARDS IDENTIFICATION

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

Dust clouds are flammable and may be explosive.  
Exposure to any kind of dust is potentially harmful.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient(s)	%W/W	CAS No.	EINECS No.	EC Classification
Synthetic amorphous silica	> 62 %	112926-00-8	2315454	Occupational Exposure Limits
Water	< 10 %	7732-18-5	2317912	
Polyvinylpyrrolidone	< 28 %	9003-39-8		Occupational Exposure Limits

## 4. FIRST AID MEASURES

<b>Eye Contact</b>	If substance has got into the eyes, immediately wash out with plenty of water. Obtain immediate medical attention.
<b>Skin Contact</b>	Wash accidental spillage from skin. Wash skin with soap and water. If symptoms develop, obtain medical attention.
<b>Ingestion</b>	Do not induce vomiting. Wash out mouth with water. If large amount swallowed or symptoms develop obtain medical attention.
<b>Inhalation</b>	Remove patient from exposure, keep warm and at rest. If symptoms develop, obtain medical attention.

## 5. FIRE-FIGHTING MEASURES

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<b>General:</b>	Ignites in contact with flame and supports combustion until the polymer has burned off. Be aware of the possibility of re-ignition. Cool the smouldering material with water spray to minimise the possibility of re-ignition.
<b>Extinguishing Media</b>	Extinguish with waterspray, foam or dry chemical.
<b>Unsuitable Extinguishing Media</b>	Carbon dioxide is unsuitable (creates dust).
<b>Fire Fighting Protective Equipment</b>	A self contained breathing apparatus should be worn.

## 6. ACCIDENTAL RELEASE MEASURES

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<b>Personal Protection</b>	Wear suitable protective clothing. Wear eye/face protection. An approved dust mask should be worn if dust is generated during handling. See Also Section 8.
<b>General:</b>	Contain spillages. Dampening with water can reduce dust. Sweep or preferably vacuum up and collect in suitable containers for recovery or disposal. Finally flush area with plenty of water.

## 7. HANDLING AND STORAGE

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<b>Handling</b>	Avoid generation of dust. See Also Section 8. 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. When handling in bulk, the possibility of dust explosion should be considered. If the risk is significant, mechanical handling equipment must be earthed and provided with explosion venting.
<b>Storage</b>	Keep container tightly closed and dry.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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<b>Synthetic amorphous silica</b>	Silica amorphous, total inhalable dust: UK EH40: WEL 6 mg/m <sup>3</sup> 8h TWA. Silica amorphous, respirable dust: UK EH40: WEL 2.4 mg/m <sup>3</sup> 8h TWA. Silica, Amorphous - Precipitated silica and silica gel: ACGIH: TLV withdrawn 2006
<b>Polyvinylpyrrolidone</b>	Silica amorphous - Precipitated silica: OSHA: PEL 6mg/m <sup>3</sup> 8h TWA Dust, total inhalable: UK EH40: WEL 10mg/m <sup>3</sup> 8h TWA. Dust, respirable: UK EH40: WEL 4mg/m <sup>3</sup> 8h TWA. Particulates not otherwise classified, inhalable: ACGIH: TLV 10mg/m <sup>3</sup> 8h TWA. Particulates not otherwise classified, respirable: ACGIH: TLV 3mg/m <sup>3</sup> 8h TWA.
<b>General:</b>	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.

<b>Respirators</b>	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.
<b>Skin Contact</b>	Wear suitable protective clothing and gloves. Plastic or rubber gloves. For example EN374-3. Wear suitable overalls.
<b>Eye Protection</b>	Safety spectacles. Goggles.
<b>Other</b>	Wear protective equipment to comply with good occupational hygiene practice. Do not eat, drink or smoke at the work place.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

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<b>Form</b>	Powder.
<b>Colour</b>	White.
<b>Odour</b>	Odourless.
<b>pH (Value)</b>	3 - 10 at 5% w/w in water.
<b>Auto Ignition Temperature (°C)</b>	Above 125
<b>Explosive Properties</b>	St class 1. In powder form this product contains particles which can form a Group A dust capable of being ignited and propagating flame. Minimum Ignition Temperature (°C): 500 Minimum Ignition Energy (mJ): 1000 Maximum explosion pressure (bar): 6.9 Maximum rate of pressure rise (bar/s): 342
<b>Solubility (Water)</b>	Insoluble.

## 10. STABILITY AND REACTIVITY

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<b>Stability</b>	Stable under normal conditions.
<b>Hazardous Reactions</b>	Take precautionary measures against static discharges. Keep at temperature not exceeding (°C): 75 Avoid contact with: Strong oxidising agents.
<b>Hazardous Decomposition Product(s)</b>	Combustion products: oxides of nitrogen, oxides of carbon

## 11. TOXICOLOGICAL INFORMATION

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<b>Acute Toxicity</b>	All components have a low order of acute toxicity. The lethal dose for humans for synthetic amorphous silica is estimated at over 15000 mg/kg. Synthetic amorphous silica is a permitted food additive in the UK, US and many other countries.
<b>Inhalation</b>	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.
<b>Eye Contact</b>	Dust may cause discomfort and mild irritation.
<b>Skin Contact</b>	Repeated and/or prolonged skin contact may cause slight irritation. Repeated and/or prolonged contact may cause dermatitis.
<b>Carcinogenicity Information</b>	IARC assessment: Amorphous silica is not classifiable as to its carcinogenicity to humans (Group 3).

## 12. ECOLOGICAL INFORMATION

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**Ecotoxicity** The following information is based on the principal component: Synthetic amorphous silica is virtually inert and has no known adverse effect on the environment.

## 13. DISPOSAL CONSIDERATIONS

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**Recommended:** Disposal should be in accordance with local, state or national legislation.

## 14. TRANSPORT INFORMATION

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UN transport information contained in this section is applicable to packages for transport exceeding 3 cubic metres.

**UN No.** 3088  
**UN Pack. Group** III

Road/Rail  
**Proper Shipping Name** SELF-HEATING SOLID, ORGANIC, N.O.S.  
**ADR/RID Class** 4.2  
**Hazards Identification** 40

AIR  
**ICAO/IATA** Refer to the IATA Transport of Dangerous Goods Regulations (latest edition) for the specific IATA proper Shipping Name.

## 15. REGULATORY INFORMATION

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**EC Classification** Not classified as dangerous for supply/use.  
**Safety Phrases** S33: Take precautionary measures against static discharges.  
Handle in accordance with good industrial hygiene and safety practices.  
Avoid inhalation of dusts.

TSCA Inventory Status: Mixture - all components included.  
DSL/NDSL Inventory Status: Mixture - all components included.

## 16. OTHER INFORMATION

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**The following sections contain revisions or new statements:** 3  
**MSDS first issued** 06/03/2001  
**MSDS data revised** 01/2010

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