

# SAFETY DATA SHEET

# <u>SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE</u> AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product Name Britesorb BK75, Britesorb BK85, Britesorb BK95,

Britesorb BK185, Britesorb PC5, BK750-H

Synthetic amorphous silica hydrated

Alternative names

CAS No. 112926-00-8 EINECS No. 2315454

REACH Registration No. 01-2119379499-16-0047

1.2 Relevant identified uses of the substance or

mixture and uses advised against

Identified use(s) Beverage processing.

Adsorbent or absorbent; Process regulator or aid; See also Annex to the extended Safety Data Sheet.

Uses advised against None known.

1.3 Details of the supplier of the safety data sheet

Company Identification PQ Silicas B.V.

P. van Dijkstraat 9 9672 AJ Winschoten The Netherlands +31 597 455111

Telephone: +31 597 455111 E-Mail (competent person) +3s.uk@pqcorp.com

1.4 Emergency telephone number

Emergency Phone No. +31 597 455111

## **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.

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

2.2 Label elements

Hazard statement(s) None.

Precautionary statement(s) None.

Safety Phrases Handle in accordance with good industrial hygiene and safety

practices.

Avoid inhalation of dusts.

2.3 Other hazards Not applicable.

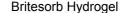
# **SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

EC Classification No. 1272/2008

 Revision: GHS v2.2
 Ref: 09-1-1-30-000

 Date of Issue: 12/2011
 PQWIN - GHS - 3

 Date Previous Issue: 07/2011
 - en Page: 1 of 6





Ingredient(s)	%W/W	CAS No.	EINECS No. /	Hazard symbol(s) and
			REACH Registration	hazard statement(s)
Synthetic amorphous	30 - 45	112926-00-8	2315454	Not classified
silica			01-2119379499-16	
Water	55 - 70	7732-18-5	2317912	

EC Classification No. 67/548/EEC

Ingredient(s)	%W/W	CAS No.	EINECS No. /	EC Classification and
			REACH Registration	Risk Phrases
Synthetic amorphous	30 - 45	112926-00-8	2315454	Not classified
silica			01-2119379499-16	
Water	55 - 70	7732-18-5	2317912	

## 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,** 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**

 Revision: GHS v2.2
 Ref: 09-1-1-30-000

 Date of Issue: 12/2011
 PQWIN - GHS - 3

 Date Previous Issue: 07/2011
 - en Page: 2 of 6



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.

See Also Section 8.

7.2 Conditions for safe storage, including any incompatibilities 7.3 Specific end use(s)

Keep container tightly closed and dry.

See also Annex to the extended Safety Data Sheet.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1 Control parameters

SUBSTANCE.	Occupational Exposure Limits
Synthetic amorphous silica	Silica amorphous, total inhalable dust: UK EH40: WEL 6 mg/m3 8h TWA. Silica amorphous, respirable dust: UK EH40: WEL 2.4 mg/m3 8h TWA. Silica, Amorphous - Precipitated silica and silica gel: ACGIH: TLV
	withdrawn 2006 Silica amorphous - Precipitated silica: OSHA: PEL 6mg/m3 8h TWA

Derived No Effect Level (DNEL)	Oral / mg/kg bw/d	Inhalation / mg/m³	Dermal / mg/kg bw/d
Markora Aguta Cuatamia officiata	Ingrity bwid	ing/iii	ing/ing bw/u
Workers - Acute - Systemic effects	-	-	-
Workers - Acute - Local effects	-	-	-
Workers - Long Term - Systemic effects	-	-	-
Workers - Long Term - Local effects	-	4	-
Consumers - Acute - Systemic effects	-	-	-
Consumers - Acute - Local effects	-	-	-
Consumers - Long Term - Systemic effects	-	-	-
Consumers - Long Term - Local effects	-	-	-

Risk management measures (RMMs) for identified uses must be implemented as described in this SDS.

	Predicted No Effect Concentration
PNEC Water (fresh)	No PNEC quantifiable due to high tolerance in acute testing.
PNEC Water (marine)	No PNEC quantifiable due to high tolerance in acute testing.
PNEC Water (intermittent)	No PNEC quantifiable due to high tolerance in acute testing.
PNEC Sediment	No PNEC quantifiable due to high tolerance in acute testing.
PNEC Soil	Not applicable
PNEC Sewage treatment plant	Not applicable
PNEC Secondary Poisoning (oral)	60000 mg/kg food

#### 8.2 Exposure controls

#### 8.2.1 Engineering Controls

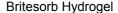
Wear protective equipment to comply with good occupational hygiene practice. Do not eat, drink or smoke at the work place. Engineering methods to prevent or control exposure are preferred. Methods include process or personnel enclosure, mechanical ventilation (dilution and local exhaust), and control 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.

Revision: GHS v2.2 Date of Issue: 12/2011 Date Previous Issue: 07/2011 Ref: 09-1-1-30-000 PQWIN - GHS - 3 Page: 3 of 6





Eye/face protection Skin protection

Safety spectacles. Eve protection with side protection (EN 166). 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

**Appearance** Powder. White. Odour Odourless. Odour Threshold (ppm) Not applicable.

pH (Value) 2 - 4 at 10% w/w in water.

Freezing Point (°C) Not applicable.

Melting Point (°C) > 1000

Boiling Point (°C) Not applicable. Flash Point (°C) [Closed cup] Not applicable. Not applicable. Evaporation rate Not applicable. Flammability (solid, gas) Not applicable. **Explosive Limit Ranges** Not applicable. Vapour Pressure (mm Hg) Vapour Density (Air=1) Not applicable. Density (g/ml) No data. Solubility (Water) Insoluble. Solubility (Other) No data. **Partition Coefficient** No data. Auto Ignition Point (°C) Not applicable. Decomposition Temperature (°C) Not applicable. Not applicable.

Viscosity (mPa. s) Explosive properties Not applicable. Oxidising Properties Not applicable. 9.2 Other information No data.

### 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 None known.

reactions

See Section: 10.3 10.4 Conditions to avoid 10.5 Incompatible materials See Section: 10.3 10.6 Hazardous decomposition None known.

product(s)

# **SECTION 11: TOXICOLOGICAL INFORMATION**

#### 11.1 Information on toxicological effects

**Acute toxicity** 

Inhalation

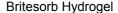
Ingestion The lethal dose for humans for synthetic amorphous silica is

estimated at over 15000 mg/kg.

Synthetic amorphous silica is a permitted food additive in the UK, US and many other countries. Oral LD50 (rat) >3100 mg/kg bw 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.

Revision: GHS v2.2 Ref: 09-1-1-30-000 PQWIN - GHS - 3 Date of Issue: 12/2011 Date Previous Issue: 07/2011 - en -Page: 4 of 6





Skin Contact Dust may have a drying effect on the skin. Dermal LD50 (rabbit)

>5000 ma/ka bw

**Eve Contact** Dust may cause discomfort and mild irritation.

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

Serious eye damage/irritation Non-irritant. **Sensitisation** Not sensitising.

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

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

12.3 Bioaccumulative potential

12.4 Mobility in soil

12.5 Results of PBT and vPvB

assessment

Inorganic.

Inorganic. The substance has no potential for bioaccumulation.

Not applicable.

Not classified as PBT or vPvB.

12.6 Other adverse effects None.

# SECTION 13: DISPOSAL CONSIDERATIONS

Disposal should be in accordance with local, state or national 13.1 Waste treatment methods

legislation.

This product normally causes no problems in sewage treatment

works, where it settles with the sewage sludge.

This material is not classified as hazardous waste under EEC Directive 91/689/EEC (and amendments). This material is not classified as hazardous waste under the Hazardous Waste (England and Wales) Regulations SI 2005 No. 894.

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.

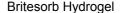
14.7 Transport in bulk according to Annex II of MARPOL73/78 and

the IBC Code

# Not applicable.

# SECTION 15: REGULATORY INFORMATION

Revision: GHS v2.2 Ref: 09-1-1-30-000 Date of Issue: 12/2011 PQWIN - GHS - 3 Date Previous Issue: 07/2011 Page: 5 of 6 - en -





# 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.

FDA: Silicon dioxide 21CFR 172.480

German Water Hazard Classification VwVwS: Product ID number 849, not hazardous to water - nwg.

**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.

This SDS was last reviewed: 12/2011

The following sections contain revisions or new statements: 9, pH

EC Classification No. 67/548/EEC Not classified as dangerous for supply/use.

Risk Phrases None

Safety Phrases Handle in accordance with good industrial hygiene and safety

practices.

Avoid inhalation of dusts.

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.

Revision: GHS v2.2 Ref: 09-1-1-30-000
Date of Issue : 12/2011 PQWIN - GHS - 3
Date Previous Issue : 07/2011 - en - Page: 6 of 6



# THIS ANNEX IS CURRENTLY ONLY AVAILABLE IN ENGLISH. A TRANSLATED VERSION IS BEING PREPARED.

# Annex to the extended safety data sheet (eSDS)

Substance: SYNTHETIC AMORPHOUS SILICA Alternative name: SILICON DIOXIDE, AMORPHOUS

Trade name: BRITESORB

### **Identified Uses for BRITESORB Version 1 - November 2010**

## Uses by workers in industrial settings

IU number	Identified use name	Process category	Sector of end use
17	Food/beverage industry – processing aid	PROC 2	SU 4
		PROC 3	
		PROC 4	
		PROC 5	

### Uses by professional workers

IU number	Identified use name	Process category	Sector of end use
17	Food/beverage industry – processing aid	PROC 2	SU 4
		PROC 3	
		PROC 4	
		PROC 5	

# GLOSSARY – Based on ECHA Guidance on information requirements and chemical assessment Chapter R.12: Use descriptor system Version 2 March 2010

	Sector of Use (SU)
	Key descriptor: Main user groups
SU 3	Industrial uses: Uses of substances as such or in preparations at industrial sites
SU 22	Professional uses: Public domain (administration, education, services, craftsmen)
	Supplementary descriptor: Sectors of end-use
SU4	Manufacture of food products

	Process Categories (PROC)
PROC2	Use in closed, continuous process with occasional controlled exposure
PROC3	Use in closed batch process (synthesis or formulation)
PROC4	Use in batch and other process (synthesis) where opportunity for exposure arises
PROC5	Mixing or blending in batch processes for formulation of preparations and articles
	(multistage and/or significant con-tact)