

Ingredient(s)	%W/W	CAS No.	EINECS No. / REACH Registration	EC Classification and Risk Phrases
Synthetic amorphous silica	25 - 45	112926-00-8	231-545-4 01-2119379499-16	Not classified
Water	55 - 75	7732-18-5	231-791-2	
Citric acid	< 10	77-92-9	201-069-1	Xi R36

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 Extinguish with waterspray, foam or dry chemical.

Unsuitable extinguishing Media Carbon dioxide is unsuitable (creates dust).

5.2 Special hazards arising from the substance or mixture Not readily combustible. Ignites in contact with flame and supports combustion until the organic material has burned off.

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. See Section: 8.2

6.2 Environmental precautions Contain spillages.

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. 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) None known.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

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US ACGIH: Silica, Amorphous - Precipitated silica and silica gel: TLV withdrawn 2006 US OSHA: Silica amorphous - Precipitated silica: PEL 6mg/m³ 8h TWA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

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

Appearance	Powder. White.
Odour	Odourless.
Odour Threshold (ppm)	Not applicable.
pH (Value)	1.5 - 3 at 25% 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.
Evaporation rate	Not applicable.
Flammability (solid, gas)	Not applicable.
Explosive Limit Ranges	Not applicable.
Vapour Pressure (mm Hg)	Not applicable.
Vapour Density (Air=1)	Not applicable.
Density (g/ml)	No data.
Solubility (Water)	Partially soluble.
Solubility (Other)	No data.
Partition Coefficient	No data.
Auto Ignition Point (°C)	Not applicable.
Decomposition Temperature (°C)	Not applicable.
Viscosity (mPa. s)	Not applicable.
Explosive properties	No data.
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	Stable.
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	No data available on mixture. 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. Citric acid is a natural constituent in most citrus fruits.
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. No data available on mixture. Synthetic amorphous silica : 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	Not classified.
Sensitisation	Not sensitising.
Mutagenicity	No evidence of genotoxicity.
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	No data available on mixture. Synthetic amorphous silica : Not classified.
Aspiration hazard	Not classified.
Other information	Not applicable.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity	No data available on mixture. Synthetic amorphous silica is virtually inert and has no known adverse effect on the environment. Organic components are readily biodegradable.
12.2 Persistence and degradability	See Section: 12.1
12.3 Bioaccumulative potential	The product has low 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.
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 EC Directive 2008/98/EC (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 applicable.
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

EINECS: Preparation - all components included.
TSCA Inventory Status: Mixture - all components included.
AICS Inventory Status: Mixture - all components included.
DSL/NDSL Inventory Status: Mixture - all components included.
German Water Hazard Classification VwVwS: WGK class 1 (low hazard to water).

- 15.2 Chemical Safety Assessment** No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16: OTHER INFORMATION

This SDS was last reviewed: 09/2014

The following sections contain revisions or new statements: All sections.

GLOSSARY

H319: Causes serious eye irritation.

R36: Irritating to eyes.

PBT: Persistent, Bioaccumulative and Toxic

EC Classification : According to Directive 67/548/EEC & Directive 1999/45/EC

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