

GeeJay Chemicals Ltd.
SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name or designation of the mixture	SILICA GEL self-indicating, orange-colourless
Registration number	-
Synonyms	amorphous silicon dioxide * synthetic amorphous silica
Issue date	19-February-2014
Version number	03
Revision date	19-July-2016
Supersedes date	29-September-2015

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

Identified uses	Desiccant. For adsorption of moisture and prevention of corrosion and mould growth.
Uses advised against	None known.

1.3. Details of the supplier of the safety data sheet

Manufacturer	GeeJay Chemicals Ltd.
Address	1 Beamish Close, Sandy, Bedfordshire, SG19 1SD
Country	U.K.
Telephone	+44 (0)1767 682774
Fax	+44 (0)1767 699697
e-mail	sales@geejaychemicals.co.uk
Contact	Jon Spencer
Web site	www.geejaychemicals.co.uk
1.4 Emergency telephone number	+44 (0)1767 682774 (08:00 - 16:30)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Regulation (EC) No 1272/2008 as amended

This mixture does not meet the criteria for classification according to Regulation (EC) 1272/2008 as amended.

Hazard summary	Exposure to powder or dusts may be irritating to eyes, nose and throat. Not classified for health hazards. However, occupational exposure to the mixture or substance(s) may cause adverse health effects.
-----------------------	--

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Hazard pictograms	None.
Signal word	None.
Hazard statements	The mixture does not meet the criteria for classification.

Precautionary statements

Prevention	Observe good industrial hygiene practices.
Response	Wash hands after handling.
Storage	Store away from incompatible materials.
Disposal	Dispose of waste and residues in accordance with local authority requirements.

Supplemental label information None.

2.3. Other hazards None known.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
Amorphous silica	>98	7631-86-9 231-545-4	01-2119379499-16-0124	-	
Classification:	-				
Ammonium Ferric Sulphate Dodecahydrate	<=1	7783-83-7 *616-517-5	-	-	
Classification:	Skin Irrit. 2;H315, Eye Irrit. 2;H319				

List of abbreviations and symbols that may be used above

M: M-factor

vPvB: very persistent and very bioaccumulative substance.

PBT: persistent, bioaccumulative and toxic substance.

#: This substance has been assigned Community workplace exposure limit(s).

Composition comments The full text for all H-statements is displayed in section 16.

SECTION 4: First aid measures

General information IF exposed or concerned: Get medical advice/attention. Show this safety data sheet to the doctor in attendance.

4.1. Description of first aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact Wash the skin immediately with soap and water. Take off contaminated clothing and wash before reuse.

Get medical attention if irritation develops and persists.

Eye contact Do not rub eyes. Immediately flush eyes with plenty of water for at least 15 minutes.

Get medical attention if irritation develops and persists.

Ingestion If swallowed, rinse mouth with water (only if the person is conscious). Drink water as a precaution. If ingestion of a large amount does occur, call a poison control centre immediately.

4.2. Most important symptoms and effects, both acute and delayed Dusts may irritate the respiratory tract, skin and eyes.

4.3. Indication of any immediate medical attention and special treatment needed Treat symptomatically.

SECTION 5: Firefighting measures

General fire hazards Not a fire hazard. No unusual fire or explosion hazards noted.

5.1. Extinguishing media

Suitable extinguishing media Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media None known.
Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture No unusual fire or explosion hazards noted.

5.3. Advice for firefighters

Special protective equipment for firefighters Wear self-contained breathing apparatus and protective clothing.

Special fire fighting procedures Move containers from fire area if you can do so without risk.
No unusual fire or explosion hazards noted. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	Use personal protective equipment. Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Avoid inhalation of dust from the spilled material. Wear a dust mask if dust is generated above exposure limits. Ensure adequate ventilation. For personal protection, see section 8. In case of spills, beware of slippery floors and surfaces.
For emergency responders	As detailed in section for non-emergency personnel. Use personal protection recommended in Section 8 of the SDS.

6.2. Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up

Avoid the generation of dusts during clean-up. Collect dust using a vacuum cleaner equipped with HEPA filter. Stop the flow of material, if this is without risk.

Large Spills: Wet down with water and dike for later disposal. Shovel the material into waste container. Following product recovery, flush area with water.

Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal.

6.4. Reference to other sections

For personal protection, see section 8. For waste disposal, see section 13 of the SDS.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Provide appropriate exhaust ventilation at places where dust is formed. Static electricity and formation of sparks must be prevented.
Do not breathe dust from this material.
Avoid contact with eyes.
Avoid prolonged exposure. Forms smooth, slippery surfaces on floors, posing an accident risk.
Practice good housekeeping.

7.2. Conditions for safe storage, including any incompatibilities

Avoid dust formation. Keep containers tightly closed in a dry, cool and well-ventilated place.
Keep in air-tight containers- material is hygroscopic.
Guard against dust accumulation of this material. Store away from incompatible materials (see Section 10 of the SDS).

7.3. Specific end use(s)

The specified uses for this material are shown in section 1 of this document

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

UK. EH40 Workplace Exposure Limits (WELs)

Additional components	Type	Value	Form
General dust	TWA	4 mg/m ³	Respirable dust.
		10 mg/m ³	Inhalable dust.

United Kingdom Components

Components	Type	Value	Form
Amorphous silica (CAS 7631-86-9)	TWA	6 mg/m ³	Inhalable dust.
		2.4 mg/m ³	Respirable dust.

Biological limit values

No biological exposure limits noted for the ingredient(s).

Recommended monitoring procedures

Follow standard monitoring procedures.

Derived no-effect level (DNEL)

Components	Type	Route	Value	Form
Amorphous silica (CAS 7631-86-9)	Industry	Inhalation	4 mg/m ³	Respirable fraction.

Predicted no effect concentrations (PNECs)

Not available.

8.2. Exposure controls

Appropriate engineering controls	<p>Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions.</p> <p>If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits.</p> <p>If exposure limits have not been established, maintain airborne levels to an acceptable level. Ventilation should be sufficient to effectively remove and prevent buildup of any dusts or fumes that may be generated during handling or thermal processing. If engineering measures are not sufficient to maintain concentrations of dust particulates below the OEL (occupational exposure limit), suitable respiratory protection must be worn.</p>
Individual protection measures, such as personal protective equipment	
General information	Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment. Eye wash fountain is recommended. Keep working clothes separately. Launder contaminated clothing before reuse.
Eye/face protection	Wear safety glasses with side shields (or goggles). Avoid contact with eyes. (EN166)
Skin protection	
- Hand protection	Suitable gloves can be recommended by the glove supplier. Use protective gloves made of: PVC or other plastic material gloves. (EN374)
- Other	Normal work clothing (long sleeved shirts and long pants) is recommended. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment. Dust Mask. Respirator type FFP2 or FFP3 (EN 149:2001)
Thermal hazards	None known.
Hygiene measures	<p>Do not get this material in contact with eyes. Do not breathe dust. When using, do not eat, drink or smoke.</p> <p>Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.</p>
Environmental exposure controls	No special measures required

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Dry flowable granules.
Physical state	Solid.
Form	Granules Beads
Colour	orange - colourless
Odour	Odourless.
Odour threshold	Not available.
pH	2.0 - 3.5 as a suspension @ 100g/l in water
Melting point/freezing point	> 1710 °C (> 3110 °F)
Initial boiling point and boiling range	Not applicable
Flash point	Not applicable.
Evaporation rate	Not applicable
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not applicable
Flammability limit - upper (%)	Not applicable
Vapour pressure	Not applicable
Vapour density	Not applicable
Relative density	Not available.

Solubility(ies)	
Solubility (water)	Insoluble
Solubility (other)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not applicable
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.
9.2. Other information	
Bulk density	700.00 - 750.00 kg/m ³
Percent volatile	0 % estimated

SECTION 10: Stability and reactivity

10.1. Reactivity	Material is stable under normal conditions.
10.2. Chemical stability	Material is stable under normal conditions.
10.3. Possibility of hazardous reactions	Hazardous polymerisation does not occur.
10.4. Conditions to avoid	Avoid conditions which create dust. Contact with incompatible materials. Heat is evolved on contact with water
10.5. Incompatible materials	None known.
10.6. Hazardous decomposition products	No dangerous reaction known under conditions of normal use.

SECTION 11: Toxicological information

General information	Occupational exposure to the substance or mixture may cause adverse effects. This product has no known adverse effect on human health. Dust may be slightly irritating to eyes and respiratory tract. Prolonged skin contact may cause skin irritation and/or dermatitis.
----------------------------	---

Information on likely routes of exposure

Inhalation	Dust may irritate respiratory system. Prolonged inhalation may be harmful.
Skin contact	Dust or powder may irritate the skin.
Eye contact	Dust in the eyes will cause irritation.
Ingestion	Not classified.
Symptoms	None known. Possible irritant effects. Dusts may irritate the respiratory tract, skin and eyes.

11.1. Information on toxicological effects

Components	Species	Test results
Amorphous silica (CAS 7631-86-9)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	> 5000 mg/kg Occluded (dermal)
<i>Inhalation</i>		
LC0	Rat	>= 0.69 mg/l, 4 hours
<i>Oral</i>		
LD50	Rat	> 5000 mg/kg

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation	Based on available data, the classification criteria are not met. Not irritating: OECD 404
Serious eye damage/eye irritation	Based on available data, the classification criteria are not met. Dust in the eyes will cause irritation.
Respiratory sensitisation	Due to partial or complete lack of data the classification is not possible.

Skin sensitisation	Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis. Due to partial or complete lack of data the classification is not possible.
Germ cell mutagenicity	Due to partial or complete lack of data the classification is not possible.
Carcinogenicity	Due to partial or complete lack of data the classification is not possible.

IARC Monographs. Overall Evaluation of Carcinogenicity

Amorphous silica (CAS 7631-86-9) 3 Not classifiable as to carcinogenicity to humans.

Reproductive toxicity	Due to partial or complete lack of data the classification is not possible.
Specific target organ toxicity - single exposure	Due to partial or complete lack of data the classification is not possible.
Specific target organ toxicity - repeated exposure	Due to partial or complete lack of data the classification is not possible.
Aspiration hazard	Due to partial or complete lack of data the classification is not possible.
Mixture versus substance information	Not applicable.
Other information	This product has no known adverse effect on human health.

SECTION 12: Ecological information

12.1. Toxicity Not expected to be harmful to aquatic organisms.

Components	Species	Test results
Amorphous silica (CAS 7631-86-9)		
Aquatic		
Algae	NOEL	Algae > 10000 mg/l, 72 hours
Crustacea	EC50	Daphnia > 10000 mg/l, 24 hours
Fish	LC0	Zebra danio (Danio rerio) > 10000 mg/l, 96 hours

* Estimates for product may be based on additional component data not shown.

12.2. Persistence and degradability	The product solely consists of inorganic compounds which are not biodegradable.
12.3. Bioaccumulative potential	Does not bioaccumulate.
Partition coefficient n-octanol/water (log Kow)	Not applicable. (inorganic substance)
Bioconcentration factor (BCF)	Not available.
12.4. Mobility in soil	Insoluble and thus presents a low mobility in most soils
Mobility in general	The product is immiscible with water and will sediment in water systems.
12.5. Results of PBT and vPvB assessment	Not applicable. PBT/vPvB assessment not available as chemical safety assessment not required/not conducted
12.6. Other adverse effects	Based on available data, there is no evidence of significant toxicity of Synthetic Amorphous Silica to environmental organisms.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste	Material should be recycled if possible. Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal. Where possible recycling is preferred to disposal or incineration. Dispose of as unused product.
EU waste code	The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Disposal methods/information	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose in accordance with all applicable regulations.
Special precautions	Dispose in accordance with all applicable regulations.

SECTION 14: Transport information

ADR

Not regulated as dangerous goods.

RID

Not regulated as dangerous goods.

ADN

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended

Not listed.

Regulation (EC) No. 850/2004 on persistent organic pollutants, Annex I

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended

Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry

Not listed.

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA

Not listed.

Authorisations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended

Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006 Annex XVII Substances subject to restriction on marketing and use

Not regulated.

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended

Not listed.

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work

Not listed.

Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens and mutagens at work

Not regulated.

Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding.

Not regulated.

Other EU regulations

Directive 2012/18/EU on major accident hazards involving dangerous substances

Not listed.

Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Always applicable.

Directive 94/33/EC on the protection of young people at work

Not listed.

Other regulations The product is classified and labelled in accordance with EC directives or respective national laws. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended.

National regulations Follow national regulation for work with chemical agents.

15.2. Chemical safety assessment No Chemical Safety Assessment has been carried out.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of New and Existing Chemicals (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

SECTION 16: Other information

List of abbreviations Not available.

References Not available.

Information on evaluation method leading to the classification of mixture The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

Full text of any H-statements not written out in full under Sections 2 to 15

H315 Causes skin irritation.
H319 Causes serious eye irritation.

Revision information SECTION 8: Exposure controls/personal protection: Appropriate engineering controls

Training information Follow training instructions when handling this material.

Disclaimer The information in the sheet was written based on the best knowledge and experience currently available.
MANUFACTURER DISCLAIMER: The information given within this SDS is correct to the best of our knowledge, information and belief at the date of its revision and publication. However, the manufacturer makes no representation, warranty or guarantee as to its accuracy, reliability or completeness, nor assumes any liability for its use. It is the user's responsibility to confirm in advance that the information is current, applicable and suitable to their circumstances for each particular use. No representative of ours has authority to waive this provision. Please call for document accuracy if the revision date has exceeded 3 years.
GeeJay Chemicals Ltd. cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use.