

Silica Gel Desiccant Data Sheet

1. Product and Company Identification.

SILICA GEL.

Geejay Chemicals Ltd., 16 Gosforth Close, Sandy, Beds. SG19 1RB.

Telephone: 01767-682774.

2. Composition/ Information On Ingredients.

Synthetic amorphous silica impregnated with cobalt chloride.

Formula SiO₂ with CoCl₂.

Silica Gel – CAS No: 7631-86-9 EINECS:231-545-4

3. Hazards Identification.

The product is very absorbent and may have a drying effect on skin and eyes. Sensitisation of skin and respiratory system is possible. Any dust could be a nuisance. Evolves heat on contact with water.

4. First Aid Measures.

1. After inhalation: remove to fresh air.
2. After skin contact: wash with water, if skin irritation persists seek medical advice.
3. After eye contact: flush with water, if irritation persists seek medical advice.
4. After ingestion: give water to drink, seek medical advice.

5. Fire Fighting Measures.

1. Products of combustion: not combustible.
2. Fire fighting procedures/extinguishing media: not applicable, unused material will not burn. Use media appropriate for surrounding fire.

6. Accidental Release Measures.

1. Personal precautions: respiratory protection if dusty, eye and hand protection.
2. Environmental precautions: try to prevent material from entering drains or watercourses. Advise authorities if spillage has entered watercourse or sewer.
3. Methods for cleaning up: sweep up or preferably vacuum up and collect in suitable container for recovery or disposal. Avoid raising dust.

7. Handling and Storage.

1. Precautions during handling: avoid raising dust, vacuum up dust sources, prevent static electric sparks. Beads may be slippery.
2. Precautions during storage: store in sealed containers in a dry place.

8. Exposure Controls/ Personal Protection.

1. General
Respiratory: effective dust mask.
Hand: protective gloves.
Eye: goggles, safety glasses.
Skin: overalls
2. Exposure limits.
Amorphous silica
UK EH40:OES 8 hr. TWA 6mg/m³ total inhalable dust.
UK EH40:OES 8 hr. TWA 2.5mg/m³ respirable dust.

9. Physical and Chemical Properties.

Appearance – 0 blue granules or beads that turn pink on absorption of water.
Odour – none.
PH – 3.5 minimum as a suspension 100g/l water.
Boiling point/melting point – not applicable.
Flammability/flash point – not applicable.
Density – 700 – 750 kg/m³
Solubility – insoluble in water and solvents.

10. Stability and Reactivity.

Stability – stable.
Conditions/materials to avoid – evolves heat in contact with water,

11. Toxicological Information.

Acute toxicity

Silica, amorphous – oral, LD50>15,000 mg/kg, rat.

- dermal LD50>5,000 mg/kg, rabbit.

Effect of exposure:

Eyes – dust may cause irritation.

Skin – heat may be evolved when in contact with water. May have a drying effect.

Skin sensitisation – cobalt compounds are skin sensitisers.

Carcinogenicity – amorphous silica is not classified as carcinogenic to humans. There is limited evidence of cobalt chloride in experimental animals.

12. Ecological/ Biological Information.

Amorphous silica is chemically and biologically inert. It is not degradable. By its insolubility in water there is a separation at every filtration and sedimentation process. Cobalt is a List II substance in EEC Directive 76/464 for the control of dangerous substances in the aquatic environment. This product must not be allowed to contaminate soil and water.

13. Disposal Considerations.

Disposal according to national and local regulations.

This material is classified as special waste under the UK special Waste regulations 1996.

This material is classified as a hazardous waste under EEC directive 91/689.

Used product may have different hazards or properties from the original product. This MSDS does NOT therefore apply to spent/used products.

14. Transport Information.

Not dangerous goods according to the transport regulations of UK Road, RID-ADR, IMO, MARPOL and ICAO.

Not classified as dangerous goods under the United Nations Transport Regulations.

No special packaging requirements.

15. Regulatory Information.

As required by the Chemicals (Hazard Information and Packaging for Supply) (Amendment) (No.2) Regulations (CHIP 99(2)) and in Approved Supply List 5th Edition.