Safety Data Sheet

Blue Silica Gel Desiccant Beads

AES-3228

Section 1. Identification

GHS product identifier	Blue Silica Gel Desiccant Beads
Stock Number	AES-3228
Chemical name	Blue Indicating Silica Gel
Other means of identification	Amorphous Silica, Silica Gel, Desiccant
Product type	Solid, Crystals

Identified uses
Control and reduction of moisture level in a humid environment.

Uses advised against	**Reason**
Not available.	

Supplier's details

A to Z Products Co., Inc.
2008 National Guard Drive
Plant City, FL 33563 USA
Support: 800-237-1264

Emergency telephone number (with hours of operation)

24 hr. CHEMTREC 1-800-424-9300 / International 1-703-527-3887

Section 2. Hazards identification

Classification

Classification of the substance or mixture in accordance with 29 CFR 1910 (OSHA HCS)

GHS07 Health Hazard

Acute Tox. 4	H302	Harmful if swallowed.
Skin Sens. 1	H317	May cause an allergic skin reaction.

GHS08 Health Hazard

Resp. Sens. 1	H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Muta. 2	H341	Suspected of causing genetic defects.
Carc. 1B	H350	May cause cancer.
Repr. 1B	H360	May damage fertility or the unborn child.

Hazards not otherwise classified: No information known.

Label Elements

GHS07

GHS08

Signal word: Danger

Hazard statements:

H302 Harmful if swallowed.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317 May cause an allergic skin reaction.
H341 Suspected of causing genetic defects.
H350 May cause cancer.
H360 May damage fertility or the unborn child.

Precautionary statements:

P284 In case of inadequate ventilation wear respiratory protection.
P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P342+P311 If experiencing respiratory symptoms call a poison center or seek medical attention.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Section 3. Composite/information on ingredients

Molecular Formula $SiO_2 \cdot nH_2O+CoCl_2$

CAS Number/other identifiers

Ingredient name	%	CAS number	Hazardous
Silica Gel	>99.7	112926-00-8	No
Cobalt Chloride	<0.3	7646-79-9	Yes

Section 4. First aid measures

Description of necessary first aid measures

Eye Contact Check for presence of contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.

Inhalation Remove to fresh air. If breathing becomes difficult, get medical attention.

Skin Contact Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation occurs.

Ingestion Give several glasses of water to drink and dilute. If large amounts swallowed, seek medical advice.

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media No specific data.

Specific hazards arising from the chemical Not considered a fire hazard.

Hazardous thermal decomposition products No specific data.

Special protective actions for fire-fighters Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill Gather spilled beads with broom and dustpan and dispense into waste disposal container.

Large spill Gather spilled beads with shovel and dispense into waste disposal container.

Section 7. Handling and storage

Precautions for safe handling

Protective measures Put on appropriate personal protective equipment (see Section 8). Do not swallow. Avoid contact with eyes, skin and clothing. Avoid breathing dust. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product dust and residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent unintentional spillage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Chemical name Silica (synthetic, amorphous)

Ingredient name	Exposure limits
Silica (synthetic, amorphous):	**ACGIH TLV:** TWA: 10 mg/m^3
Inorganic Cobalt Compounds:	TWA: 0.02 mg/m^3 as Co, A3: Animal Carcinogen
	OSHA PEL: TWA: 80 / (%SiO_2) mg/m^3

Appropriate engineering controls Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Environmental exposure Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side shields.

Skin protection

Hand protection Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

Physical state	Solid, Crystals
Color	Blue
Odor	Odorless
Specific Gravity	2.1 (Water=1)
pH	5.5 - 9.0 (in 5% slurry)
% Volatiles by volume @ 21°C (70°f)	0
Melting point	Not applicable.
Boiling point	Not applicable.
Flash point	Not applicable.
Evaporation rate	Not applicable.
Flammability (solid, gas)	Not available.
Lower and upper explosive (flammable) limits	Not available.
Vapor pressure	Not applicable.
Vapor density	Not applicable.
Relative density	Not available.
Solubility	Insoluble, Chloride may leach out.
Auto-ignition temperature	Not applicable.
Decomposition temperature	Not applicable.
Viscosity	Not applicable.

Section 10. Stability and reactivity

Reactivity	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	The product is stable.
Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	Moisture, extreme heat
Incompatible materials	No specific data.
Hazardous decomposition products	Oxides of carbon and silicon may be formed when heated.
Incompatibility with powerful oxidizers	Reacts with hydrogen fluoride, fluorine, oxygen difluoride, chlorine trifluoride, strong acids, strong bases and oxidizers

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Silica (synthetic, amorphous)	LC50 Inhalation Dusts and mists LD50 Dermal LD50 Oral	Not Available Not Available Not Available	Not Available Not Available Not Available	- - -
Inorganic Cobalt Compounds	LC50 Inhalation Dusts and mists LD50 Dermal LD50 Oral	Not Available Not Available Not Available	Not Available Not Available Not Available	- - -

Irritation/Corrosion

Not available.

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Cobalt and its compounds have been shown to cause cancer in laboratory animals.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure Not available.

Potential acute health effects

Eye Contact No known significant effects or critical hazards.

Inhalation No known significant effects or critical hazards.

Skin contact No known significant effects or critical hazards.

Ingestion May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact No specific data.

Inhalation No specific data.

Skin contact No specific data.

Ingestion No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects Not available.

Potential delayed effects Not available.

Long term exposure

Potential immediate effects Not available.

Potential delayed effects Not available.

Potential chronic health effects

General No known significant effects or critical hazards.

Carcinogenicity No known significant effects or critical hazards.

Mutagenicity No known significant effects or critical hazards.

Teratogenicity No known significant effects or critical hazards.

Developmental effects No known significant effects or critical hazards.

Fertility effects No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

Eco toxicity Not expected to be toxic to aquatic life.

Section 13. Disposal considerations

Disposal methods The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and contact with soil, waterways, drains and sewers.

RCRA classification Not regulated.

Section 14. Transport information

	DOT Classification	TDG Classification	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.

Special precautions for user Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II or MARPOL 73/78 and the IBC Code Not available.

Section 15. Regulatory information

U.S. Federal regulations TSCA 8(a) CDR Exempt/Partial exemption: This material is listed or exempted.

Clean Air Act Section 112 Not listed.

Clean Air Act Section 602 Class I Substances Not listed.

Clean Air Act Section 602 Class II Substances Not listed.

DEA List I Chemicals (Precursor Chemicals) Not listed.

DEA List II Chemicals (Essential Chemicals) Not listed.

SARA 302/304

Composition/information on ingredients

No Products were found.

SARA 304 RQ Not applicable.

SARA 311/312

Classification Not applicable.

Composition/information on ingredients

No Products were found.

State regulations

Massachusetts This material is listed.

New York This material is not listed.

New Jersey This material is listed.

Pennsylvania This material is not listed.

California Prop. 65

This product is known to contain chemicals currently listed as carcinogens or reproductive toxins.

International lists

National inventory

Australia This material is listed or exempted.

Canada This material is listed or exempted.

China This material is listed or exempted.

Europe This material is listed or exempted.

Japan This material is listed or exempted.

Malaysia Not determined.

New Zealand This material is listed or exempted.

Philippines This material is listed or exempted.

Republic of Korea This material is listed or exempted.

Taiwan This material is listed or exempted.

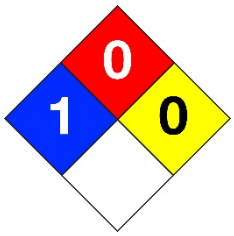
Section 16. Other information

HMIS (USA)

Health Hazard	1
Fire Hazard	0
Reactivity	0
Personal Protection	0

National Fire Protection Association (USA)

Health	1
Flammability	0
Reactivity	0



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Key to abbreviations

ATE = Acute Toxicity Estimate
BCF = Bio concentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("MARPOL" = marine pollution)
UN = United Nations

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