



1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

Product Name : sSORB
Synonym : Silica Gel; Amorphous Silica

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

Recommended use : Adsorbent

1.3 Details of the supplier of the safety data sheet

Producer : Interra Global Corporation
800 Busse Highway, Suite 101
Park Ridge, IL 60068
USA
Telephone : +1 (847) 292-8600

1.4 Emergency telephone number

Emergency : +1 (847) 292-8600

2. HAZARD(S) IDENTIFICATION

2.1 Classification of the substance or mixture

Not a hazardous substance or mixture.

2.2 GHS label elements, including precautionary statements

Not a hazardous substance or mixture.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical identity : $\text{SiO}_2 \cdot n\text{H}_2\text{O}$
Common name : Silica Gel; Amorphous Silica
Numbers of identity : CAS-Nr.: 7631-86-9
Impurities : None

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice

Consult a qualified medical professional. Show this data sheet to the doctor in attendance. Move out of the dangerous area. Never give anything by mouth to an unconscious person.

If ingested



Give several glasses of water to drink to dilute. Do not induce vomiting. If large amounts are ingested, get medical advice.

Skin contact

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

Eye contact

Flush eyes with plenty of water. Check for and remove any contact lenses if possible. Continue flushing eyes with water for at least 15 minutes. Get medical attention if irritation occurs.

Inhalation

Move individual to fresh air. If breathing is difficult, get medical attention.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or section 11.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media : Any media suitable for the surrounding fire.

5.2 Special hazards arising from the substance or mixture

Fire hazards : Not considered to be a fire hazard

Explosion hazards : Not considered to be an explosion hazard

5.3 Advice for firefighters

Use protective clothing and breathing equipment appropriate for the surrounding fire.

5.4 Further information

No data available

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. For personal protection see section 8.

6.2 Environmental precautions

No special precautions.

6.3 Methods and materials for containment and cleaning up



Use appropriate tools to put the spilled solid in a convenient waste disposal container. Vacuuming or wet sweeping may be used to avoid dust dispersal. Dispose of material according to local and regional requirements.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. When pouring into a container of flammable liquid, ground both containers electrically to prevent a static electric spark. Containers of the material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

7.2 Conditions for safe storage, including any incompatibilities

Suitable for any general chemical storage area.
Keep container tightly closed.
Hygroscopic. Keep in a dry place.
Storage class (TRGS 510): Non-combustible solids

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2, no other specific uses are stipulated.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters/exposure limits

NIOSH REL : TWA 6 mg/m³
OSHA PEL : TWA 20 mppcf (80 mg/m³/%SiO₂)

8.2 Appropriate engineering controls

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit. Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. Facilities storing or handling this material should be equipped with an eyewash station.

8.3 Personal protective equipment

Safety glasses, lab coat, gloves, and dust respirator. Be sure to use an NIOSH approved respirator or equivalent.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state : Solid
Color : White, Translucent



Odor	: Odorless
Odor threshold	: No data available
pH-value	: 3.0 – 8.0 (in 5% slurry)
Melting point	: 1610C (2930F)
Freezing Point	: No data available
Initial boiling point	: 2230C (4046F)
Flash point	: No data available
Evaporation rate	: No data available
Flammability (solid, gas)	: Non-flammable
Explosion limits	: No data available
Vapor pressure	: Not applicable
Vapor density	: Not applicable
Relative density	: 2.1 (Water = 1)
Solubility	: Insoluble
Partition coefficient	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available

10. STABILITY AND REACTIVITY

Reactivity

Reacts with hydrogen fluoride, fluorine, oxygen difluoride, chlorine trifluoride, strong acids, strong bases, and oxidizers.

Chemical stability

The product is stable under normal ambient and anticipated storage and handling conditions of temperature and storage.

Conditions to avoid

Moisture, extreme heat, and incompatibles.

Incompatible materials

This product is incompatible with with hydrogen fluoride, fluorine, oxygen difluoride, chlorine trifluoride, strong acids, strong bases, and oxidizers.

Hazardous decomposition products

Oxides of carbon and silicon may be formed when heated to decomposition.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effect

Acute toxicity

Inhalation	: No data available
Ingestion	: No data available



Dermal : No data available

Skin corrosion/irritation

No special risk under normal use. Dusts of particulates may cause minor abrasion. May cause dryness.

Serious eye damage/eye irritation

No special risk under normal use. Dusts of particulates may cause mechanical irritation, possibly including pain, tearing, and redness. Scratching of the cornea can occur if eye is rubbed.

Respiratory or skin sensitization

No special risk under normal use. Inhalation of airborne particulate may lead to mechanical irritation of the respiratory tract and mucous membranes.

Germ cell mutagenicity

No data available

Carcinogenicity

IARC: 3 – Group 3 - Not classifiable as to its carcinogenicity to humans (Silica-Amorphous, precipitated).

Reproductive toxicity

No data available

Specific target organ toxicity following single exposure

No data available

Specific target organ toxicity following repeated exposure

No data available

Aspiration hazard

Dust may irritate lungs. Amorphous silica does not produce silicosis.

11.2 Information on likely routes of exposure

Inhalation and contact

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No data available.

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

No data available.



12.4 Mobility in soil
No data available.

12.5 Results of PBT and vPvB assessment
No data available.

12.6 Other adverse effects
No data available.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product:

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Dispose of in accordance with federal, state, and local environmental control regulations.

Contaminated packaging:

Packaging may contain residual dust. Dispose of in accordance with federal, state, and local environmental control regulations.

14. TRANSPORT INFORMATION

DOT (U.S.A.)	: Not a dangerous good.
IMDG	: Not a dangerous good.
Transport hazard classes	: Not applicable.
Packing group	: Not applicable.
Environmental hazards	: See section 12.
Transport in bulk	: Not applicable.
Special precautions for users	: Not applicable.

15. REGULATORY INFORMATION

15.1 Federal and state regulations:

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313

This material does not contain any chemical components with known CAS numbers that exceed the threshold (de Minimis) reporting levels established by SARA Title III, Section 313.

DOT Classification



Not a DOT controlled material (United States)

15.2 Other classifications

Toxic Control Substances Act (TSCA)

This product complies with all applicable rules or orders under the Toxic Control Substances Act (TSCA).

16. OTHER INFORMATION

16.1	Preparation Date	: June 1, 2015
	Revision Number	: 3
	Revision Date	: May 9, 2016
	Revised By	: KT
	Approved By	: BW

16.2 Warranty

The information contained herein is based upon data considered true and accurate. However, Interra Global Corp. makes no warranties, express or implied, as to the accuracy or adequacy of the information contained herein or the results to be obtained from the use thereof. This information is offered solely for the user's consideration, investigation and verification. Since the use and conditions of this information and the material described herein are not within the control of Interra Global Corp., it assumes no responsibility for injury to the user or third persons. The material described herein is sold only pursuant to Interra Global Corp's Terms and Conditions of Sale, including those limiting warranties and remedies contained therein. It is the responsibility of the user to determine whether any use of this data and information is in accordance with applicable federal, state or local laws and regulations.

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product Identifiers

Product Name : sSORB Blue Indicating
Synonym : Blue Indicating Silica Gel; Amorphous Silica

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

Recommended use : Adsorbent

1.3 Details of the supplier of the safety data sheet

Producer : Interra Global Corporation
800 Busse Highway, Suite 101
Park Ridge, IL 60068
USA

Telephone : +1 (847) 292-8600

1.4 Emergency telephone number

Emergency : +1 (847) 292-8600

2. HAZARD(S) IDENTIFICATION

2.1 Classification of the substance or mixture

GHS classification in accordance with 29 CFR 1910 (OSHA HCS)

Respiratory sensitization (Category 1), H334
Skin sensitization (Category 1), H317
Reproductive toxicity (Category 1B), H360
Acute aquatic toxicity (Category 2), H401
Carcinogenicity (Category 2), H351
Chronic aquatic toxicity (Category 3), H412

2.2 GHS label elements, including precautionary statements

Pictogram:



Signal word: Danger

Hazard statement(s)

H317	May cause allergic skin reaction
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H351	Suspected of causing cancer

H360	May damage fertility or the unborn child
H401	Toxic to aquatic life
H412	Harmful to aquatic life with long lasting effects

Precautionary statement(s)

P201	Obtain special instructions before use
P202	Do not handle until all safety precautions have been read and understood
P261	Avoid breathing dust
P271	Use only outdoors or in a well-ventilated area
P272	Contaminated work clothing should not be allowed out of the workplace
P273	Avoid release to the environment
P280	Wear protective gloves/protective clothing/eye protection/face protection
P285	In case of inadequate ventilation wear respiratory protection
P302 + P352	IF ON SKIN: Wash with plenty of water and soap
P304 + P341	IF INHALED: If breathing is difficult, remove person to fresh air and keep at rest in position comfortable for breathing
P308 + P313	IF EXPOSED OR CONCERNED: Get medical advice.
P333 + P313	If skin irritation or rash occurs: Get medical advice
P363	Wash contaminated clothing before reuse
P405	Store locked up
P501	Dispose of contents/container to an approved waste disposal plant in accordance with local regulation(s)

Sensitizing components:

Cobalt dichloride
May produce an allergic reaction

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical identity	: $\text{SiO}_2 \cdot n\text{H}_2\text{O} + \text{CoCl}_2$
Common name	: Blue Indicating Silica Gel; Amorphous Silica
Numbers of identity	: CAS-Nr. : 112926-00-8 (> 99.7%) (Silica Gel)
	: EC-No. : 231-545-4
	: CAS-Nr. : 7646-79-9 (< 0.3%) (Cobalt Dichloride)
	: EC-No. : 231-589-4

Cobalt dichloride is included in the Candidate List of Substances of Very High Concentration (SVHC) according to Regulation (EC) No. 1907/2006 (REACH)

Impurities : None

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice



Consult a qualified medical professional. Show this data sheet to the doctor in attendance. Move out of the dangerous area. Never give anything by mouth to an unconscious person.

If ingested

Give several glasses of water to drink to dilute. If large amounts are ingested, get medical advice.

Skin contact

Wash with soap and water. Get medical attention if irritation develops.

Eye contact

Flush eyes with plenty of water. Check for and remove any contact lenses if possible. Continue flushing eyes with water for at least 15 minutes. Get medical attention if irritation occurs.

Inhalation

Move individual to fresh air. If breathing is difficult, get medical attention.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or section 11.

4.3 Indication of any immediate medical attention and special treatment needed

No data available

5. FIREFIGHTING MEASURES

Extinguishing media

Suitable extinguishing media : Any media suitable for the surrounding fire.

Special hazards arising from the substance or mixture

Fire hazards : Not considered to be a fire hazard

Explosion hazards : Not considered to be an explosion hazard

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing dust. Ensure adequate ventilation. For personal protection see section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up

Use appropriate tools to put the spilled solid in a convenient waste disposal container. Dispose of material according to local and regional requirements.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Do not breathe dust. Containers of this material may be hazardous when empty since they retain product residues (e.g. dust, solids). For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Suitable for any general chemical storage area. Keep container tightly closed. Hygroscopic.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2, no other specific uses are stipulated.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters/exposure limits

Component	CAS-No.	Value	Control Parameters	Basis
Silica-Amorphous, precipitated	112926-00-8	TWA	6.000000 mg/m ³	USA. OSHA - Table Z-1 Limits for Air Contaminants - 1910.1000
Silica-Amorphous, precipitated	112926-00-8	TWA	20.000000 Million particles/ft ³	USA. Occupational Exposure Limits (OSHA) - Table Z-3 Mineral Dusts
	Remark(s)	Millions of particles per cubic foot of air, based on impinger samples counted by light-field techniques. Mppcf x 35.3 = million particles per cubic meter = particles per c.c.		
Silica-Amorphous, precipitated	112926-00-8	TWA	80.000000 mg/m ³ / % SiO ₂	USA. Occupational Exposure Limits (OSHA) - Table Z-3 Mineral Dusts
	Remark(s)	See table Z-3		
Silica-Amorphous, precipitated	112926-00-8	TWA	6.000000 mg/m ³	USA. NIOSH Recommended Exposure Limits
Cobalt dichloride	7646-79-9	TWA	0.020000 mg/m ³	USA. ACGIH Threshold Limit Values (TLV)
	Remark(s)	Pulmonary function Asthma Myocardial effects Confirmed animal carcinogen with unknown relevance to humans varies		

8.2 Appropriate engineering controls

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit. Handle in



accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

8.3 Personal protective equipment

Safety glasses, lab coat, gloves, and dust respirator. Be sure to use an NIOSH approved respirator or equivalent.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state	: Solid, crystals / beads
Color	: Blue - pink
Odor	: Odorless
Odor threshold	: No data available
pH-value	: 5.5 – 9.0 (in 5% slurry)
Melting point	: No data available
Freezing Point	: No data available
Initial boiling point	: No data available
Flash point	: No data available
Evaporation rate	: No data available
Flammability (solid, gas)	: Non-flammable
Explosion limits	: No data available
Vapor pressure	: Not applicable
Vapor density	: Not applicable
Relative density	: 2.1 (Water = 1)
Solubility	: Insoluble, chloride may leach out
Partition coefficient	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available

10. STABILITY AND REACTIVITY

10.1 Reactivity

No Data Available.

10.2 Chemical stability

The product is stable under normal ambient and anticipated storage and handling conditions of temperature and storage.

10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to avoid

No data available.

10.5 Incompatible materials

This product is incompatible with powerful, alkali metals, strong oxidizing agents.

10.6 Hazardous decomposition products

Other decomposition products – No data available.

In the event of fire see section 5.1.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effect

Acute toxicity

Inhalation	: No data available
Ingestion	: No data available
Dermal	: No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

IARC	: 2B – Group 2B: Possibly carcinogenic to humans (Cobalt chloride)
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IARC	: 3 – Group 3: Not classifiable as to its carcinogenetic to humans (Silica-Amorphous, precipitated)
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Reproductive toxicity

No data available

Specific target organ toxicity following single exposure

No data available

Specific target organ toxicity following repeated exposure

No data available

Aspiration hazard

Dust may irritate lungs.

11.2 Information on likely routes of exposure

Absorbed through skin, eye contact, inhalation, and ingestion.

11.3 Additional information

Exposure to dust particles may cause irritation of the respiratory tract. May cause dryness and irritation to mucous membranes, nose, and throat. Symptoms may include coughing, sore throat, and wheezing. May cause slight irritation and abrasion in case of skin contact. Dust may cause eye irritation, redness, and pain.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Silica gel is not expected to be toxic to aquatic life.

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

No data available.

12.6 Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life with long lasting effects.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product:

Dispose of in accordance with federal, state, and local environmental control regulations.

Contaminated packaging:

Packaging may contain residual dust. Dispose of in accordance with federal, state, and local environmental control regulations.

14. TRANSPORT INFORMATION

DOT (U.S.A.)

Not a dangerous good.

IMDG

Not a dangerous good.

Transport hazard classes

Not applicable.

Packing group

Not applicable.

Environmental hazards

See section 12.

Transport in bulk

Not applicable.

Special precautions for users



Not applicable.

15. REGULATORY INFORMATION

15.1 Federal and state regulations:

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313

The following components are subject to reporting levels established by SARA Title III, Section 313.

Cobalt dichloride

CAS-No.: 7646-79-9

Revision date: 2009-07-17

SARA 311/312 Hazards

Chronic health hazard

Massachusetts Right to Know Components

Silica-Amorphous, precipitated

CAS-No.: 112926-00-8

Revision date: 1993-04-24

Pennsylvania Right to Know Components

Silica-Amorphous, precipitated

CAS-No.: 112926-00-8

Revision date: 1993-04-24

Cobalt dichloride

CAS-No.: 7646-79-9

Revision date: 2009-07-17

New Jersey Right to Know Components

Silica-Amorphous, precipitated

CAS-No.: 112926-00-8

Revision date: 1993-04-24

Cobalt dichloride

CAS-No.: 7646-79-9

Revision date: 2009-07-17

California Proposition 65 Components

This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

Toxic Control Substances Act (TSCA)

Listed on the TSCA Inventory.

DOT Classification



Not a DOT controlled material (United States)

15.2 Other classifications

HMIS (U.S.A.)

Health hazard	: 2
Fire hazard	: 0
Reactivity	: 0
Personal protection	: E

National Fire Protection Association (U.S.A.)

Health	: 2
Flammability	: 0
Reactivity	: 0

Toxic Control Substances Act (TSCA)

This product complies with all applicable rules or orders under the Toxic Control Substances Act (TSCA).

16. OTHER INFORMATION

16.1	Preparation Date	: June 1, 2015
	Revision Number	: 3
	Revision Date	: June 9, 2016
	Revised By	: KT
	Approved By	: BW

16.2 Warranty

The information contained herein is based upon data considered true and accurate. However, Interra Global Corp. makes no warranties, express or implied, as to the accuracy or adequacy of the information contained herein or the results to be obtained from the use thereof. This information is offered solely for the user's consideration, investigation and verification. Since the use and conditions of this information and the material described herein are not within the control of Interra Global Corp., it assumes no responsibility for injury to the user or third persons. The material described herein is sold only pursuant to Interra's Terms and Conditions of Sale, including those limiting warranties and remedies contained therein. It is the responsibility of the user to determine whether any use of this data and information is in accordance with applicable federal, state or local laws and regulations.