



# Safety Data Sheet

## Silica Gel Indicating

### Blue (Dry) to Pink (Wet)



#### Section 1 – Product and Company Information

Date: March 1, 2022 Rev. D

**Product Name:** Silica Gel, Blue Indicating (Beads)  
**Chemical Family:** Amorphous Silica  
**Catalog Numbers:** 26-0888, 33-0246, 33-0247, 33-0248, 33-0316 and 38-0106

**Product Use:** Industrial: Adsorbent used to reduce moisture content of Compressed Air, Compressed Natural Gas and other Compressed Gasses, also used to indicate wet moisture content of sample stream of gas by changing color from blue to pink

**Company Identification:** Van Air Systems / Van Gas Technologies  
 2950 Mechanic Street, Lake City, PA USA  
 16423-2095  
 E-mail: [info@vanairsystems.com](mailto:info@vanairsystems.com)  
[www.vanairsystems.com](http://www.vanairsystems.com) / [www.vangastech.com](http://www.vangastech.com)

**Emergency Telephone Number call Chemtel:** US, Canada, Puerto Rico **1-800-255-3924** (Van Air)  
 International **+01-813-248-0585** (Van Air)

**Customer Service Telephone Number:** 814-774-2631

#### Section 2 – Hazard Identification

CLASSIFICATION: according to Regulation (EC)No 1272/2008  
 GHS CLASSIFICATION: Carcinogenicity: Category 1B

**Color:** Blue to Pink depending on water content  
**Physical state:** Solid beads  
**Odor:** Odorless  
**Emergency Overview:** Avoid excess contact with skin and eyes. Avoid breathing dust. Wash thoroughly with soap and water after handling.

**Signal Word:** **Danger**

**Hazard Pictogram:**



#### Potential Health Effects:

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 in a well-ventilated area or outdoors  
 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)

#### Health Hazards (acute and chronic):

HAZARD STATEMENTS: H350 May cause cancer  
 PRECAUTIONARY STATEMENTS: P281 Use personal protective equipment as required.  
 P261 Avoid breathing dust.  
 P308+P313 If exposed or concerned: Get medical advice/attention.

**EU CLASSIFICATION:** according to Directive 67/548/EEC and 1999/45/EC

SYMBOL: T

R-phrase : R49 May cause cancer by prolonged inhalation.

S-phrase : S53 Avoid exposure-obtain special instructions before use.

S45 In case of accident or if you feel unwell, seek medical advice immediately.

### Section 3 – Composition / Information on Ingredients

CHEMICAL IDENTITY	CONTENT
Silica gel ; (1)	98%
Cobalt chloride ;(2)	< 1%

SYNONYMS : (2); Cobalt (II) chloride

FORMULA : (1); SiO<sub>2</sub>·nH<sub>2</sub>O  
 (2); CoCl<sub>2</sub>

MOLECULAR WEIGHT : (2); 129.84  
 (1); Not available

CAS NUMBER : (1); 7631-86-9  
 (2); 7646-79-9

TSCA INVENTORY : (1),(2); Listed

EINECS No. : (1); 231-545-4  
 (2); 231-589-4

EC INDEX NUMBER : (2); 027-004-00-5  
 (1); Not listed

#### HAZARDOUS COMPONENTS:

(2) Cobalt chloride

Carc.1B, Muta.2, Repr.1B, Acute Tox.4+, Resp.Sens.1, Skin Sens.1, Aquatic Acute 1, Aquatic Chronic 1,

GHS08,GHS07,GHS09, Dgr

Carc.Cat.2, Muta.Cat.3, Repr.Cat.2, Xn, N ; R22-43-50/53

### Section 4 - First Aid Measures

**General:** Wash off immediately with soap and plenty of water. In the case of respirable dust and/or fumes, use self-contained breathing apparatus and dust impervious protective suit. Use personal protective equipment.

**Eyes:** Flush with water for several minutes. Get medical attention if irritation occurs.

**Skin:** Remove contaminated clothing / shoes. Wash with soap and water. Treat for dry skin or mild irritation. Get medical attention if irritation persists.

**Inhalation:** Move person to fresh air. If breathing is difficult, consult a Physician.

**Ingestion:** Give several glasses of water to drink to dilute. If symptoms exist consult a Physician.

**Note to Physician:** Treat symptomatically and supportively.

## Section 5 – Fire Fighting Measures

<b>Flammable Properties:</b>	Non-flammable
Flash Point:	Not applicable.
Method Used:	Not applicable
<b>Flammability Limits:</b>	
LEL:	Not applicable.
UEL:	Not applicable.
<b>Fire Fighting Instructions:</b>	Non-combustible.
<b>Extinguishing Media:</b>	Not applicable.
<b>Unusual Fire and Explosion Hazards:</b>	Oxides of carbon and silicon may be formed when heated

## Section 6 – Accidental Release Measures

<b>Small/Large Spills:</b>	Use personal Protective equipment. Avoid breathing dust. Prevent further spill. Do not sweep into drains. Avoid water. Sweep, shovel or vacuum for disposal per local, state and federal requirements or reuse.
<b>Waste Disposal Method:</b>	Discharge into environment must be avoided. Dispose of per local, state and federal requirements.

## Section 7 – Handling and Storage

<b>Handling:</b>	Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure. Handle material with suitable protection. This material is hygroscopic.
<b>Storage:</b>	Store in cool dry place. Keep containers tightly closed since material is hygroscopic. Repair damaged containers.
<b>Incompatibilities:</b>	Oxidizers, water and hydrogen fluoride

## Section 8 – Exposure Controls and Personal Protection

<b>Engineering controls:</b>	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 of airborne contaminants below the exposure limits. Handle in accordance with good industrial hygiene and safety practices. Wash hands before breaks, eating and at the end of the workday.
------------------------------	--

### Exposure Limits:

Component	CAS-No.	Value	Control Parameters	Basis
Silica-Amorphous, precipitated	112926-00-8	TWA	6.0 mg/m <sup>3</sup>	USA. NIOSH Recommended Exposure Limits
Cobalt dichloride	7646-79-9	TWA	0.020 mg/m <sup>3</sup>	m <sup>3</sup> USA. ACGIH Threshold Limit Values (TLV)

### Personal Protective Equipment (PPE)

<b>Respirators:</b>	Use NIOSH or EN 149 approved respirator if dust cannot be controlled.
<b>Hands and Feet:</b>	Rubber gloves and chemical / slip resistant safety shoes. Recommended
<b>Eye Protection:</b>	Safety glasses with side shields or chemical safety goggles.
<b>Other Protective Clothing &amp; Equipment:</b>	Clean, body-covering skin protecting clothing is recommended.
<b>Work/Hygienic Practices:</b>	Wash thoroughly with soap and water after handling.

## Section 9 – 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

## Section 10 – Stability and Reactivity

Stability (Conditions to avoid):	Stable under normal temperatures and pressures. Moisture sensitive.
Decomposition Products:	Not available
Incompatibility (Materials to avoid):	Oxidizers, water and hydrogen fluoride
Hazardous Polymerization:	Not available
Conditions to avoid:	Heat, moisture, direct sunlight

## Section 11 – Toxicological Information

ACUTE TOXICITY(oral/dermal/inhalation) : (1); LDLo(oral,rat):	Not available as the mixture 5gm/kg(NTIS**,OTS0537804)
LCLo(ihl,rat):	2190mg/m3/4H(NTIS**,OTS0537804)
TOXICITY DATA :	(1); May be harmful if inhaled and ingested.
SKIN CORROSION/IRRITATION :	Not available as the mixture (1); May cause skin irritation.
EYE DAMAGE/EYE IRRITATION : Mild(NTIS**,OTS0537804)	Not available as the mixture (1); Eye; rabbit; 25mg/24H;
RESPIRATORY OR SKIN SENSITIZATION :	Not available as the mixture and components
GERM CELL MUTAGENICITY :	Not available as the mixture and components
REPRODUCTIVE TOXICITY :	Not available as the mixture and components
STOT (SINGLE EXPOSURE) :	Not available as the mixture and components
STOT (REPEATED EXPOSURE) :	Not available as the mixture and components
ASPIRATION HAZARD :	Not available as the mixture and components
CARCINOGENICITY :	
IARC :	2B – Group 2B: Possibly carcinogenic to humans (Cobalt chloride)
IARC :	3 – Group 3: Not classifiable as to its carcinogenetic to humans (Silica-Amorphous, precipitated)
NTP :	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA :	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
<b>Aspiration hazard</b>	Dust may irritate lungs. Amorphous silica is not known to cause silicosis.

## Section 12 - Ecological Information

Environmental Fate: No data available

Eco-toxicity: No data available

### 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.

## Section 13 – Disposal Considerations

Waste Disposal: All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. The information presented here pertains only to the product as shipped in its intended condition as described in SDS section 3.

EPA Waste Number: Not Applicable.

## Section 14 – Transport Information

U.S. Department of Transportation (D.O.T.) Not regulated as dangerous goods.

Sea Transport (IMDG): Not classified as a dangerous good under transportation regulations.

IATA: Not regulated as dangerous goods. Per IATA DGR

Transportation of Dangerous Goods (TDG – Canada)

Class: Not Regulated

Group: Not Regulated

PIN Number: Not Regulated

Other: Secure product with suitable hold down devices during shipment in dry containers (avoid moisture).

## Section 15 – Regulatory Information

OSHA Hazard Communication Standard: This product is a “Non-Hazardous Chemical” as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

### 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 chloride

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 chloride

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 chloride

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)

**Toxic Control Substances Act (TSCA)**

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

**Section 16 – Other Information**

**HMIS RATING (estimated)-** Health: 1                      Flammability: 0                      Reactivity: 0

**NFPA RATING (estimated)-** Health: 1                      Flammability: 0                      Reactivity: 0

Personal Protective Rating: E Legend: N.A. – Not Applicable, N.E. – Not Established, N.D. - Not Determined.

Recommended Uses and Restrictions: This product is designed to be used as a desiccant material for compressed air and gas. If your intended use is consistent with our stated uses(s), contact our technical sales department.

*The information contained herein is based on data considered to be accurate as currently available to Van Air Inc.. However, no warranty is expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof. Van Air Inc. assumes no responsibility for injury to the vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, Van Air Inc. assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material even if reasonable safety procedures are followed. Furthermore, vendee assumes any and all risk in his or her use of the material. In no event shall Van Air Inc. be liable for any claims, losses, or damages of any Vendee or third party for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Van Air Inc. has been advised of the possibility of such damages by any and all forms of communication.*