



Post Apple Scientific, inc
8893 Gulf Rd
North East, PA 16428

SAFETY DATA SHEET

Revision Date 10-Feb-2015

Revision Number 1

1. Identification

Product Name Silicagel blue indicating

Cat No. : C6977

Synonyms Silicon dioxide

Recommended Use Laboratory chemicals.

Uses advised against No Information available

Details of the supplier of the safety data sheet

Company

Post Apple Scientific, inc.
8893 Gulf Rd
North East, PA 16428
Tel: 814-725-3330

Emergency Telephone Number

CHEMTREC Tel. No. **US:**001-800-424-9300 /
Europe:001-703-527-3887

2. Hazard(s) identification

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

| | |
|---------------------------|-------------|
| Respiratory Sensitization | Category 1 |
| Skin Sensitization | Category 1 |
| Germ Cell Mutagenicity | Category 2 |
| Carcinogenicity | Category 1B |
| Reproductive Toxicity | Category 1A |

Label Elements

Signal Word

Danger

Hazard Statements

May cause an allergic skin reaction
May cause allergy or asthma symptoms or breathing difficulties if inhaled
Suspected of causing genetic defects
May cause cancer by inhalation
May damage fertility



Precautionary Statements

Prevention

Obtain special instructions before use
 Do not handle until all safety precautions have been read and understood
 Use personal protective equipment as required
 Avoid breathing dust/fume/gas/mist/vapors/spray
 In case of inadequate ventilation wear respiratory protection
 Contaminated work clothing should not be allowed out of the workplace
 Wear protective gloves

Response

IF exposed or concerned: Get medical attention/advice

Inhalation

IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing
 If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician

Skin

IF ON SKIN: Wash with plenty of soap and water
 If skin irritation or rash occurs: Get medical advice/attention
 Wash contaminated clothing before reuse

Storage

Store locked up

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Harmful to aquatic life with long lasting effects

3. Composition / information on ingredients

| Component | CAS-No | Weight % |
|--------------------|-----------|----------|
| Silica, amorphous | 7631-86-9 | 100 |
| Cobaltous chloride | 7646-79-9 | 1 |

4. First-aid measures

| | |
|--|--|
| Eye Contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention. |
| Skin Contact | Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Obtain medical attention. |
| Inhalation | Remove from exposure, lie down. Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Obtain medical attention. |
| Ingestion | Clean mouth with water. Get medical attention. |
| Most important symptoms/effects | May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause allergic skin reaction. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing |
| Notes to Physician | Treat symptomatically |

5. Fire-fighting measures

Suitable Extinguishing Media Water spray. Carbon dioxide (CO₂). Dry chemical. chemical foam.

Unsuitable Extinguishing Media No information available

Flash Point No information available
Method - No information available

Autoignition Temperature No information available

Explosion Limits

Upper No data available

Lower No data available

Sensitivity to Mechanical Impact No information available

Sensitivity to Static Discharge No information available

Specific Hazards Arising from the Chemical

Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products

Silicon dioxide

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

Health
2

Flammability
0

Instability
0

Physical hazards
N/A

6. Accidental release measures

Personal Precautions Ensure adequate ventilation. Use personal protective equipment.

Environmental Precautions See Section 12 for additional ecological information. Avoid release to the environment. Collect spillage.

Methods for Containment and Clean Up Avoid dust formation. Prevent product from entering drains. Sweep up or vacuum up spillage and collect in suitable container for disposal. Do not flush into surface water or sanitary sewer system.

7. Handling and storage

Handling Avoid contact with skin and eyes. Do not breathe dust. Do not breathe vapors or spray mist. Use only in area provided with appropriate exhaust ventilation.

Storage Keep in a dry, cool and well-ventilated place. Keep container tightly closed.

8. Exposure controls / personal protection

Exposure Guidelines

| Component | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|--------------------|-----------------------------|------------------------------------|--|
| Silica, amorphous | | (Vacated) TWA: 6 mg/m ³ | IDLH: 3000 mg/m ³ TWA: 6 mg/m ³ |
| Cobaltous chloride | TWA: 0.02 mg/m ³ | | |

| Component | Quebec | Mexico OEL (TWA) | Ontario TWA EV |
|--------------------|-----------------------------|------------------|-----------------------------|
| Cobaltous chloride | TWA: 0.02 mg/m ³ | | TWA: 0.02 mg/m ³ |

Legend

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

NIOSH IDLH: The National Institute for Occupational Safety and Health Immediately Dangerous to Life or Health

Engineering Measures Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal Protective Equipment

Eye/face Protection Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

| | |
|---|--------------------------|
| Physical State | Solid |
| Appearance | Blue |
| Odor | Odorless |
| Odor Threshold | No information available |
| pH | 3.5 10% aq. solution |
| Melting Point/Range | 1600 °C / 2912 °F |
| Boiling Point/Range | No information available |
| Flash Point | No information available |
| Evaporation Rate | No information available |
| Flammability (solid,gas) | No information available |
| Flammability or explosive limits | |
| Upper | No data available |
| Lower | No data available |
| Vapor Pressure | 10 mmHg @ 1732 °C |
| Vapor Density | No information available |
| Relative Density | 2.20 |
| Solubility | No information available |
| Partition coefficient; n-octanol/water | No data available |
| Autoignition Temperature | No information available |
| Decomposition Temperature | No information available |
| Viscosity | No information available |
| Molecular Formula | O2 Si |
| Molecular Weight | 60.08 |

10. Stability and reactivity

| | |
|---|--|
| Reactive Hazard | None known, based on information available |
| Stability | Stable under normal conditions. |
| Conditions to Avoid | Incompatible products. Exposure to moist air or water. Exposure to moisture. |
| Incompatible Materials | Strong oxidizing agents |
| Hazardous Decomposition Products | Silicon dioxide |
| Hazardous Polymerization | No information available. |
| Hazardous Reactions | None under normal processing. |

11. Toxicological information

Acute Toxicity

Product Information No acute toxicity information is available for this product

Component Information

| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|--------------------|---------------------|------------------------|-----------------------|
| Silica, amorphous | >5000 mg/kg (Rat) | >2000 mg/kg (Rabbit) | >2.2 mg/L (Rat) 4 h |
| Cobaltous chloride | 80 mg/kg (Rat) | Not listed | Not listed |

Toxicologically Synergistic Products No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation No information available

Sensitization No information available

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Component | CAS-No | IARC | NTP | ACGIH | OSHA | Mexico |
|--------------------|-----------|----------|------------|------------|------------|------------|
| Silica, amorphous | 7631-86-9 | group 3 | Not listed | Not listed | Not listed | Not listed |
| Cobaltous chloride | 7646-79-9 | Group 2B | Not listed | A3 | X | Not listed |

Mutagenic Effects No information available

Reproductive Effects No information available.

Developmental Effects No information available.

Teratogenicity No information available.

STOT - single exposure None known

STOT - repeated exposure None known

Aspiration hazard No information available

Symptoms / effects, both acute and delayed Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing

Endocrine Disruptor Information No information available

Other Adverse Effects The toxicological properties have not been fully investigated. See actual entry in RTECS for complete information.

12. Ecological information

Ecotoxicity

Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system.

| Component | Freshwater Algae | Freshwater Fish | Microtox | Water Flea |
|--------------------|--------------------|-------------------------------------|------------|---------------------|
| Silica, amorphous | EC50: 440 mg/L/72h | LC50: 5000 mg/L/96 h | Not listed | EC50: 7600 mg/L/48h |
| Cobaltous chloride | Not listed | Cyprinus carpio: LC50=0.33 mg/L 96h | Not listed | 1.1-1.6 mg/L 48h |

Persistence and Degradability No information available

Bioaccumulation/ Accumulation No information available.

Mobility No information available.

| Component | log Pow |
|--------------------|---------|
| Cobaltous chloride | 0.85 |

13. Disposal considerations

Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as a

hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

14. Transport information

| | |
|-----------------|---------------|
| DOT | Not regulated |
| TDG | Not regulated |
| IATA | Not regulated |
| IMDG/IMO | Not regulated |

15. Regulatory information

International Inventories

| Component | TSCA | DSL | NDSL | EINECS | ELINCS | NLP | PICCS | ENCS | AICS | IECSC | KECL |
|--------------------|------|-----|------|-----------|--------|-----|-------|------|------|-------|------|
| Silica, amorphous | X | X | - | 231-545-4 | - | | X | X | X | X | X |
| Cobaltous chloride | X | X | - | 231-589-4 | - | | X | X | X | X | X |

Legend:

X - Listed

E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.

F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.

N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.

P - Indicates a commenced PMN substance

R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.

S - Indicates a substance that is identified in a proposed or final Significant New Use Rule

T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.

XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B)).

Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.

Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

U.S. Federal Regulations

TSCA 12(b) Not applicable

SARA 313

| Component | CAS-No | Weight % | SARA 313 - Threshold Values % |
|--------------------|-----------|----------|-------------------------------|
| Cobaltous chloride | 7646-79-9 | 1 | 0.1 |

SARA 311/312 Hazardous Categorization

| | |
|-----------------------------------|-----|
| Acute Health Hazard | Yes |
| Chronic Health Hazard | Yes |
| Fire Hazard | No |
| Sudden Release of Pressure Hazard | No |
| Reactive Hazard | No |

Clean Water Act Not applicable

Clean Air Act

| Component | HAPS Data | Class 1 Ozone Depletors | Class 2 Ozone Depletors |
|--------------------|-----------|-------------------------|-------------------------|
| Cobaltous chloride | X | | - |

OSHA Occupational Safety and Health Administration
Not applicable

CERCLA
Not applicable

California Proposition 65 This product does not contain any Proposition 65 chemicals

State Right-to-Know

| Component | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|--------------------|---------------|------------|--------------|----------|--------------|
| Silica, amorphous | X | X | X | - | - |
| Cobaltous chloride | - | X | X | X | - |

U.S. Department of Transportation

Reportable Quantity (RQ): N
 DOT Marine Pollutant N
 DOT Severe Marine Pollutant N

U.S. Department of Homeland Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade No information available

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR

WHMIS Hazard Class D2A Very toxic materials



16. Other information

Prepared By Regulatory Affairs
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Revision Summary This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS)

Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of SDS