MeLa Group Pty Limited

SAFETY DATA SHEET

SILICA GEL BLUE

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name	Silica Gel Blue
Other Names	Welldry, Drywell, Silica Gel Direct
Product Use	Drying agent
Company Name	MeLa Group Pty Ltd
Address	3 Longtown Crt Craigieburn VIC 3064
Telephone Number	03 8339 7362
Emergency Telephone	0487 329 898

2. HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

Health Hazard

H350 - May cause cancer.	Carcinogenicity - Danger - Hazard Category 1B
H360 - May damage fertility or the unborn child.	Toxic to Reproduction - Danger - Hazard Category 1B
H400 - Very toxic to aquatic life.	Acute Aquatic Toxicity – Category 1
H410 - Very toxic to aquatic life with long lasting effects,	Chronic Aquatic Toxicity – Category 1

GHS Label Elements Including 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.

Response
If exposed or concerned: Get medical attention.

Storage
Store locked up.

Disposal
Dispose of contents/container in accordance with local, regional and national regulations.

Other hazards which do not result in classification No additional information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Characterisation **Mixture**

Hazardous Ingredients	CAS No	Concentration
Silica	7631-86-9	>98%
Cobalt chloride	7646-79-9	0.9%

4. FIRST AID MEASURES

Inhalation Remove to fresh air. If breathing is difficult apply oxygen. If breathing has stopped, apply artificial respiration. Seek medical attention.

Ingestion Rinse mouth then drink one to two large glasses of water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Seek immediate medical attention.

Skin In case of skin contact, immediately remove contaminated clothing and wash affected areas with water and soap. Seek medical attention. Launder clothing before reuse. Thoroughly clean shoes before reuse.

Eyes In case of eye contact, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical attention.

5. FIRE FIGHTING MEASURES

For major fires call the Fire Brigade. Ensure that an escape path is available from any fire.

Suitable Extinguishing Media Use an extinguishing media suitable for surrounding fire.

Hazardous Combustion Products Silicon dioxide.

Special Protective Equipment and Precautions for Fire Fighters Wear Safe Work Australia approved self-contained breathing apparatus and full protective clothing.

Unusual Fire or Explosion Hazards Not considered to be a fire hazard.
Not considered to be an explosion hazard.

Hazchem Code Not allocated

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures Wear Safe Work Australia approved self-contained breathing apparatus and full protective clothing. Evacuate all non-essential personnel from affected area. Ensure adequate ventilation. Do not breathe dust.

Environmental Precautions In the event of a major spill, prevent spillage from entering drains or water courses.

Methods and Materials Stop leak if safe to do so and contain spill. Vacuum or wet sweep

for Containment and Cleaning Up	spilled material and place in an appropriate container for disposal. Avoid generating dust.

7. HANDLING AND STORAGE

Precautions for Safe Handling	Use of safe work practices are recommended to avoid eye or skin contact and inhalation of dust. Food, beverages and tobacco products should not be stored or consumed where this material is in use. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Provide eyewash fountains and safety showers in close proximity to points of potential exposure.
Conditions for Safe Storage	Store in a tightly closed original container in a cool, dry, and well ventilated area. Protect against physical damage. Protect from moisture. This product produces heat when exposed to water. Keep away from fluorides, hydrochloric acid, vinyl acetate and strong oxidizers. Store locked up.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters - Exposure Standards (Safe Work Australia)	**Fumed silics (respirable dust):** TWA: - ppm /2 mg/m^3 STEL: - ppm / - mg/m^3 **Cobalt, metal dust and fume (as Co):** TWA: - ppm /0.05 mg/m^3 STEL: - ppm / - mg/m^3
Engineering Controls	Provide local exhaust ventilation or other engineering controls to keep the airborne concentrations of dusts below occupational exposure standards.

Personal Protective Equipment (PPE)

Respiratory Protection	Wear a Safe Work Australia approved particulate filter respirator if ventilation is inadequate to keep dusts below the occupational exposure standards. See Australian Standards AS/NZS 1715 and 1716 for more information.
Eye/Face Protection	Safety glasses with top and side shields or goggles. See Australian Standards AS/NZS 1336 and 1337 for more information.
Skin Protection	Chemical resistant protective gloves, protective clothing, apron and boots. See Australian Standards AS/NZS 2161, 2210.1 and 2210.2 for more information.
Thermal Hazards	No information available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Solid – blue powder or granules
Odour	Odourless
pH	2.3 – 7.4 (Suspension)

Melting Point	No information available
Initial Boiling Point / Range	2230°C
Flash Point (PM)	Not applicable
Evaporation Rate	Not applicable
Flammability	No information available
Lower Flammability or Explosive Limit	Not applicable
Upper Flammability or Explosive Limit	Not applicable
Vapour Pressure	Not applicable
Vapour Density	Not applicable
Relative Density (Specific Gravity)	2.2 – 2.6
Solubility in Water	Insoluble
Auto-ignition Temperature	Not applicable
Decomposition Temperature	No information available
Percent Volatile	Not applicable

10. STABILITY AND REACTIVITY

Chemical Stability	Stable at ambient temperature and under normal conditions of use.
Possibility of Hazardous Reactions	Will not occur.
Conditions to Avoid	Moisture.
Incompatible Materials	Fluorides, hydrochloric acid, vinyl acetate and strong oxidizers.
Hazardous Decomposition Products	Silicon dioxide.

11. TOXICOLOGICAL INFORMATION

Toxicity

Silica:
Oral LD_{50} (rat) = 10000 mg/kg
Dermal LD_{50} (rabbit) = 5000 mg/kg
Draize eye (rabbit) = 25 mg / 24 hr - Mild
May cause eye and skin irritation. May cause respiratory and digestive tract irritation. May cause lung damage.
Prolonged and repeated exposure to airborne free respirable crystalline silica can result in lung disease silicosis, tuberculosis (silicotuberculosis) and lung cancer.
Silicogenic dust with a particle size smaller than 5µm causes inflammatory reaction in the alveoli which can lead to scarring and formation of fibrosis in connecting tissue and causes the loss of the elasticity in the lung tissue. The development of silicosis may increase the risks of additional health effects. The risk of developing silicosis is dependent upon the exposure intensity and duration. The only and most efficient measure to avoid silicosis is preventing the formation of silicogenic dust at the workplace and strict observance of specific occupational exposure limits.

Cobalt chloride:
Oral LD_{50} (rat) = 418 mg/kg
Oral LD_{50} (mouse) = 80 mg/kg
May cause cancer by inhalation. Harmful if swallowed. May cause

	sensitization by inhalation and skin contact. Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment. May impair fertility. Possible risk of irreversible effects. Repeated oral administration may produce goiter and reduced thyroid activity. Prolonged or repeated skin exposure may cause dermatitis. Chronic exposure associated with kidney, liver, heart and lung damage.
Acute Health Effects	Inhalation: May cause respiratory irritation. Ingestion: Harmful if swallowed. Eye: May cause mechanical eye irritation. Skin: May cause mechanical skin irritation.
Skin Corrosion/Irritation	Not expected to be a hazard.
Serious Eye Damage/Irritation	Not expected to be a hazard.
Respiratory or Skin Sensitisation	Not expected to be a hazard.
Germ Cell Mutagenicity	Cobalt chloride is classified as Mutagen Category 3 by Safe Work Australia.
Carcinogenicity	Silica is classified by IARC as a Group 3 - Not classifiable as to its carcinogenicity to humans. Cobalt and cobalt compounds are classified by IARC as a Group 2B - Possibly carcinogenic to humans, Cobalt chloride is classified as Carcinogen Category 2 by Safe Work Australia.
Reproductive Toxicity	Cobalt chloride is classified as toxic to reproduction Category 2 by Safe Work Australia.
Specific Target Organ Toxicity (STOT) - Single Exposure	Not expected to be a hazard.
Specific Target Organ Toxicity (STOT) - Repeated Exposure	Not expected to be a hazard.
Aspiration Hazard	Not expected to be a hazard.
Existing Conditions Aggravated by Exposure	Persons with impaired respiratory function and conditions such as emphysema or chronic bronchitis may incur further disability if excessive concentrations of particulate are inhaled. Effects on lungs are significantly enhanced in the presence of respirable particles.

12. ECOLOGICAL INFORMATION

Ecotoxicity	**Cobalt chloride:** **Aquatic organisms:** EC_{50} 48hr (Daphnia magna)= 1.1-1.6 mg/L EC_{50} 96hr (Chlorella vulgaris) = 0.52 mg/L LC_{50} 96hr (Cyprinus carpio) = 0.33 mg/L
Persistence and Degradability	No information available.
Bio-accumulative Potential	No information available.
Mobility in Soil	No information available.

13. DISPOSAL CONSIDERATIONS

Disposal methods and containers	Dispose according to applicable local and state government regulations.
Special precautions for landfill or incineration	Please consult your state Land Waste Management Authority for more information.

14. TRANSPORT INFORMATION

Not classified as a dangerous good according to the Australian Code for the Transport of Dangerous goods by road or rail (ADG 7).

UN Number	Not applicable
Proper Shipping Name	Not applicable
Dangerous Goods Class	Not applicable
Subsidiary Risk	Not applicable
Hazchem Code	Not applicable
Packing Group	Not applicable
Special Provisions	Not applicable
Limited Quantities	Not applicable
Packagings & IBCs - Packing Instruction	Not applicable
Packagings & IBCs - Special Packing Provisions	Not applicable
Portable Tanks & Bulk Containers – Instructions	Not applicable
Portable Tanks & Bulk Containers – Special Provisions	Not applicable

15. REGULATORY INFORMATION

Silica and cobalt chloride are listed in the Australian Inventory of Chemical Substances (AICS).

16. OTHER INFORMATION

Last Revision of MSDS	Rev 1.0 (13/12/2012)
Prepared by	MSDS.COM.AU Pty Ltd www.msds.com.au
Abbreviations Used	GHS: Globally Harmonised System of Classification and Labeling of Chemicals IARC: International Agency for Research on Cancer STEL: Short term exposure limit TWA: Time weighted average

Emergency Contacts

MeLa Group Pty Ltd	**03 8339 7362**
MeLa Group Pty Ltd - Emergency Number	**0487 329 898**
Police and Fire Brigade	**000**
Poisons Information Centre	**13 11 26**

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This MSDS is prepared in accord with the Safe Work Australia document “Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals - December 2011”