MAXSIL™ - SAFETY DATA SHEET

IDENTIFICATION OF THE MATERIAL AND SUPPLIER

MAXSIL is a powder material designed as an ingredient for the manufacture of liquid potassium or calcium silicate formulations and granular plant nutrients.

The material is supplied by MaxSil Pty Ltd, 1/21 Belconnen Crescent, Brendale Qld 4500

Telephone contact numbers of 0411 862 647, 0408 642 611

HAZARDS IDENTIFICATION

Does not meet the criteria of the UN Globally Harmonised System (GHS) for hazard classification

Not classified as a dangerous good by the criteria of the ADG code

Safety Phases

S22	Do not breathe dust
S36	Wear suitable protective clothing
S51	Use only in well ventilated areas

COMPOSITION/INFORMATION ON INGREDIENTS

Substance:	MAXSIL spheres
Synonyms:	Amorphous Silica, Silicon Dioxide
CAS No:	7631-86-9

Substance:	Calcium
Synonyms:	Calcium Carbonate, Oxides of Calcium
CAS No:	7440-70-2

Substance:	Sodium Carbonate
Synonyms	Washing Soda, Soda Ash
CAS No:	497-19-8

FIRST AID MEASURES

Inhalation: If inhaled to excess remove exposed person to fresh air. If necessary, seek medical attention.

Skin Contact: Wash skin with mild soap and water

Eye Contact: Flush eyes with water and carefully rinse under the eyelids. If necessary seek medical attention.

Ingestion: Obtain first aid or medical assistance immediately

Most important Symptoms/Effects, Acute and Delayed:

Dust may result in irritation

FIRE FIGHTING MEASURES

Fire and explosion hazards: MAXSIL is non-combustible. No danger of explosion.

Extinguishing Media: Not applicable

Protective equipment for Fire fighting: Wear NIOSH approved self-contained breathing apparatus

NFPA Ratings: O = minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

Health = O Fired = O Reactivity = O

ACCIDENTAL RELEASE MEASURES

Personal Precautions: Use 42 CFR 84 NIOSH/MSHA approved respirators when airborne concentrations equal or exceed the Permissible Exposure Limit.

Containment and cleanup: Collect using methods that minimise creation of airborne dust such as vacuum cleaning. Place in a suitable container for recycling or disposal.

HANDLING AND STORAGE

Safe Handling: Avoid generating dust, handle with adequate ventilation

Storage: Keep dry, store in closed containers

PERSONAL PROTECTION AND EXPOSURE CONTROLS

Exposure Standards:

Ingredient	Reference	TWA ppm	TWA mg/m^3	STEL ppm	STEL mg/m^3
Calcium Carbonate	SWA (AUS)	-	Not Set	-	-
Amorphous silica (respirable dust)	SWA (AUS)	-	2	-	-
Sodium Carbonate	SWA (AUS)	-	10	-	-

Biological Limits: No biological limit allocated

Engineering Controls: Avoid inhalation. Use in well ventilated areas. Where an Inhalation risk exists, mechanical extraction ventilation is recommended. Maintain dust levels below the recommended exposure standard.

PPE

Eye/Face: Wear dust proof goggles
Hands: If heavy contamination is likely wear leather or cotton gloves
Body: Not required under normal conditions of use
Respiratory: Wear a Class P2 (particulate) respirator

PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Fine white to grey powder
Odour: Odourless
Flammability: Non-Flammable
Flash Point: Not Relevant
Melting Point: 1550^o to 1700^o Celsius
pH: 7.5-8.5 (1% slurry)
Specific Gravity: 1.5
Solubility (water): Insoluble
Density 800-1,000 kg/m^3

STABILITY AND REACTIVITY

Chemical stability:	Stable under recommended conditions of storage
Conditions to avoid:	Avoid heat, sparks, open flames and other ignition sources
Material to avoid:	Incompatible with hydrofluoric acid (may evolve toxic silicon tetrafluoride gas) heating this product over 500^{o} C may result In the formation of crystalline silica (Cristobalite or tridymite) which can cause silicosis and is a known human carcinogen
Hazardous Decomposition Products:	Not expected to evolve hazardous decomposition products
Hazardous reactions:	Polymerization will not occur

TOXICOLOGICAL INFORMATION

Health Hazard summary:	Irritant. Use safe work practices to avoid eye or skin contact or inhalation. Over exposure to amorphous silica does not cause silicosis.
Eye:	Irritant. Contact may result in irritation, lacrimation, pain and redness.
Inhalation:	Irritant. Over exposure to dust may result in mucous membrane irritation of the respiratory tract. Symptoms may be delayed until several hours after exposure.
Skin:	Irritant. Contact may result in irritation, redness, pain and rash
Ingestion:	Low toxicity. Ingestion of large quantities may result in nausea, vomiting and gastrointestinal irritation.
Toxicity data:	No LD50 data is available for this product.

TRANSPORT INFORMATION

Not Classified as a Dangerous Good by the Criteria of the ADG Code, IMDG or IATA

	Land Transport (ADG)	Sea Transport (IMDG/IMO)	Air Transport (IATA/ICAO)
UN Number	*None allocated*	*None allocated*	*None allocated*
Proper Shipping Name	*None allocated*	*None allocated*	*None allocated*
Transport Hazard Class	*None allocated*	*None allocated*	*None allocated*
Packing Group	*None allocated*	*None allocated*	*None allocated*

Environmental hazards: The material is alkaline and should not be disposed of to sewer, open drains or waterways

Hazchem Code: None Allocated

REGULATORY INFORMATION

Poison Schedule: A poison schedule number has not been allocated to this product using the criteria in the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)

Inventory Listing(s) **AUSTRALIA: AICS (Australian Inventory of Chemical Substances)**. All components are listed on AICS or are exempt.

OTHER INFORMATION

Additional Information

This product has a particle size that ranges from 0.01 micron to 15 micron.

Respirators

In general, the use of respirators should be limited and engineering controls employed to avoid exposure. If respiratory equipment must be worn ensure correct respirator selection and training is undertaken. Remember that some respirators may be extremely uncomfortable when used for long periods. The use of air powered or air supplied respirators should be considered where prolonged or repeated use is necessary.

Personal Protective Equipment Guidelines

The recommendation for protective equipment contained within this document is provided as a guide only. Factors such as method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

Abbreviations:

ACGIH	American Conference of Governmental Industrial Hygienists
CAS #	Chemical Abstract Service Number – used to uniquely identify chemical compounds
CNS	Central Nervous System
EC No.	European Community Number
EMS	Emergency Procedures for Ships Carrying Dangerous Goods
GHS	Globally Harmonised System
GTEPG	Group Text Emergency Procedure Guide
IARC	International Agency for Research on Cancer
LC50	Lethal Concentration, 50% / Median Lethal Concentration
LD50	Lethal Dose, 50% / Median Lethal Dose
mg/m^3	Milligrams per Cubic Metre
OEL	Occupational Exposure Limit
pH	Hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline)
ppm	Parts per million
STEL	Short Term Exposure Limit
STOT-RE	Specific target organ toxicity (repeated exposure)
STOT-SE	Specific target organ toxicity (single exposure)
SUSMP	Standard for the Uniform Scheduling of Medicines and Poisons
SWA	Safe Work Australia
TLV	Threshold Limit Value
TWA	Time Weighted Average

Report Status

This document has been compiled by MaxSil Pty Ltd ("MaxSil") and serves as the Safety Data Sheet ("SDS") for the MaxSil™ range of products.

The SDS is based on information concerning the product from in house, industry and third-party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained from SF.

While MaxSil Pty Ltd has taken all due care to include accurate and up to date information in this SDS it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, SF accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS.

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