



SAFETY DATA SHEET

According to Safe Work Australia

Printing date 24.02.2015

Revision: 24.02.2015

1 . IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

Product Name: GT SILICA

Other Means of Identification: Mixture

Recommended Use of the Chemical and Restriction on Use:

Silicon additive for hydroponic nutrient solutions

Details of Manufacturer or Importer:

Growth Technology Pty Ltd

1-45 Stockdale Road

O'Connor WA 6163

Phone Number: +61 8 9331 3091

Emergency telephone number: National Poison Information Centre: 13 11 26

2 . HAZARDS IDENTIFICATION

Hazardous Nature:

Classified as Hazardous according to criteria of National Occupational Health & Safety Commission (NOHSC), Australia.

Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)



Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

STOT SE 3 H335 May cause respiratory irritation.

Signal Word Warning

Hazard Statements

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

Precautionary Statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P264 Wash hands thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P321 Specific treatment (see on this label).

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P332+P313 If skin irritation occurs: Get medical advice/attention.

P337+P313 If eye irritation persists: Get medical advice/attention.

P302+P352 IF ON SKIN: Wash with plenty of water.

P312 Call a POISON CENTER/doctor if you feel unwell.

P362+P364 Take off contaminated clothing and wash it before reuse.

P405 Store locked up.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P501 Dispose of contents/container in accordance with local/regional/national regulations.

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3 . COMPOSITION AND INFORMATION ON INGREDIENTS

Chemical Characterization: Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Hazardous Components:

| | | |
|-----------|--|--------|
| 1312-76-1 | Silicic acid, potassium salt | 30-60% |
| |  Acute Tox. 3, H301;  Eye Dam. 1, H318;  Skin Irrit. 2, H315; STOT SE 3, H335 | |

4 . FIRST AID MEASURES

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if breathing problems develop.

Skin Contact:

In case of skin contact, remove contaminated clothing and wash affected areas with water and soap. Seek medical attention if symptoms occur.

Eye Contact:

In case of eye contact, hold eyelids open and rinse with water for at least 15 minutes. Seek medical attention if symptoms occur.

Ingestion:

If swallowed, do not induce vomiting. Immediately rinse mouth with water. Give plenty of water. Never give anything by mouth to an unconscious person. Seek immediate medical attention.

Symptoms Caused by Exposure:

Inhalation: May cause respiratory irritation.

Skin Contact: Causes skin irritation.

Eye Contact: Causes severe eye irritation.

Ingestion: May cause irritation of the mouth, throat, and stomach.

5 . FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Water spray, dry chemical, regular foam and carbon dioxide.

Specific Hazards Arising from the Chemical:

Absorbs carbon dioxide on exposure to air which results in the deposition of insoluble silica.

May react with ammonium salts resulting in evolution of ammonia gas.

Flammable hydrogen gas will form on reaction with aluminium, copper, zinc, etc.

Gels and generates heat when mixed with acid.

Special Protective Equipment and Precautions for Fire Fighters:

Wear Safe Work Australia approved self-contained breathing apparatus and full protective clothing.

6 . ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:

Wear Safe Work Australia approved respiratory protection, chemical resistant gloves, protective clothing and safety boots. Evacuate all non-essential personnel from affected area. Do not breathe vapours. Ensure adequate ventilation. Extinguish all sources of ignition.

Environmental Precautions:

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

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Methods and Materials for Containment and Cleaning Up:

Stop leak if safe to do so and absorb spill with sand, earth, vermiculite or some other absorbent material. Collect the spilled material and place into a suitable container for disposal.

7. HANDLING AND STORAGE

Precautions for Safe Handling:

Use of safe work practices are recommended to avoid eye or skin contact and inhalation of vapours. Use only outdoors or in a well-ventilated area.

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 cool, dry and well ventilated area. Keep in original container tightly closed when not in use. Protect from moisture, direct sunlight and sources of ignition. Keep away from oxidising agents, acids, ammonium salts, aluminium, tin, lead, zinc. Store at temperatures between 0 °C - 95 °C. Inspect regularly for damage or leaks.

Suitable packaging material is mild steel. Unsuitable packaging material is aluminium, fibreglass, copper, brass, zinc or galvanized material.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Standards:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Engineering Controls:

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below the limits.

Respiratory Protection:

Use a Safe Work Australia approved vapour respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentrations of mist or vapour, inadequate ventilation, development of respiratory tract irritation) and engineering controls are not feasible. See Australian Standards AS/NZS 1715 and 1716 for more information.

Skin Protection:

PVC, PVA, nitrile, neoprene, rubber or vinyl gloves. See Australian/New Zealand Standard AS/NZS 2161 for more information. When selecting gloves for use against certain chemicals, the degradation resistance, permeation rate and permeation breakthrough time should be considered.

Occupational protective clothing (depending on conditions in which it has to be used, in particular as regards the period for which it is worn, which shall be determined on the basis of the seriousness of the risk, the frequency of exposure to the risk, the characteristics of the workstation of each worker and the performance of the protective clothing). See Australian/New Zealand Standard AS/NZS 4501 for more information.

Eye and Face Protection:

Eye and face protectors for protection against splashing materials or liquids. See Australian/New Zealand Standard AS/NZS 1337 for more information.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:

| | |
|-------------------------|-----------------------------|
| Form: | Clear to hazy, thick liquid |
| Colour: | Colourless |
| Odour: | Odourless |
| Odour Threshold: | Odourless |

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| | |
|---|--------------------------|
| pH-Value: | 11-13 |
| Melting point/Melting range: | Not applicable |
| Initial Boiling Point/Boiling Range: | 105-108 °C |
| Flash Point: | No information available |
| Flammability: | No information available |
| Auto-ignition Temperature: | Not applicable |
| Explosion Limits: | |
| Lower: | No information available |
| Upper: | No information available |
| Vapour Pressure: | Not applicable |
| Relative Density: | 1.2-1.7 |
| Solubility in Water: | Soluble in water |

10 . STABILITY AND REACTIVITY

Possibility of Hazardous Reactions: Hazardous polymerisation will not occur.

Chemical Stability: Stable at ambient temperature and under normal conditions of use.

Conditions to Avoid: Direct sunlight and sources of ignition.

Incompatible Materials: Oxidising agents, acids, ammonium salts, aluminium, tin, lead, zinc.

Hazardous Decomposition Products: Flammable hydrogen gas

11 . TOXICOLOGICAL INFORMATION

Toxicity:

LD₅₀/LC₅₀ Values Relevant for Classification:

1312-76-1 Silicic acid, potassium salt

| | | |
|------|------|------------------|
| Oral | LD50 | 1300 mg/kg (rat) |
|------|------|------------------|

Acute Health Effects

Inhalation: May cause respiratory irritation.

Skin: Causes skin irritation.

Eye: Causes severe eye irritation.

Ingestion: May cause irritation of the mouth, throat, and stomach.

Skin Corrosion / Irritation: Causes skin irritation.

Serious Eye Damage / Irritation: Causes serious eye irritation.

Respiratory or Skin Sensitisation: Based on classification principles, the classification criteria are not met.

Germ Cell Mutagenicity: Based on classification principles, the classification criteria are not met.

Carcinogenicity: This product does NOT contain any IARC listed chemicals.

Reproductive Toxicity: Based on classification principles, the classification criteria are not met.

Specific Target Organ Toxicity (STOT) - Single Exposure: May cause respiratory irritation.

Specific Target Organ Toxicity (STOT) - Repeated Exposure:

Based on classification principles, the classification criteria are not met.

Aspiration Hazard: Based on classification principles, the classification criteria are not met.

Chronic Health Effects: No information available

Existing Conditions Aggravated by Exposure: No information available

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12 . ECOLOGICAL INFORMATION

Ecotoxicity: No information available**Aquatic toxicity:** No information available**Persistence and Degradability:** No information available**Bioaccumulative Potential:** Does not bioaccumulate.**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

UN Number Not regulated**Proper Shipping Name** Not regulated**Dangerous Goods Class** Not regulated**Packing Group:** Not regulated

15 . REGULATORY INFORMATION

Australian Inventory of Chemical Substances:

7732-18-5 | Water

1312-76-1 | Silicic acid, potassium salt

Standard for the Uniform Scheduling of Drugs and Poisons (SUSMP) - Poison Schedule:

Not Scheduled.

16 . OTHER INFORMATION

Creation Date: 24.02.2015**Prepared by:** MSDS.COM.AU Pty Ltdwww.msds.com.au**Abbreviations and acronyms:**

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC₅₀: Lethal concentration, 50 percentLD₅₀: Lethal dose, 50 percent

IARC: International Agency for Research on Cancer

STEL: Short Term Exposure Limit

TWA: Time Weighted Average

NES: National Exposure Standard (Safe Work Australia - Workplace Exposure Standards For Airborne Contaminants)

Disclaimer

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"

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determinations as to the suitability of the information provided to the particular circumstances in which the product is used.