Page: 1 of 5

This revision issued: June, 2002

Section 1 - Identification of Chemical Product and Company

Statement of Hazardous Nature

This product is classified as: Not classified as hazardous according to the criteria of NOHSC Australia.

Not a Dangerous Good according to the Australian Dangerous Goods (ADG) Code.

Emergency Response: 1800 033 111

Sipcam Pacific Australia Pty Ltd

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AUSTRALIA

Phone: (03)5223 3746

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ACN 073 176 888

Substance: Triasulfuron is a sulfonylurea derived herbicide.

Trade Name: Sipgran 750 WG

Product Use: Agricultural herbicide for use as directed on product label.

Creation Date: June, 2002 Revision Date: June, 2002

Section 2 – Composition/Information on Ingredients

| Ingredients | CAS No | Conc,% | TWA (mg/m³) | STEL (mg/m³) |
|---------------------------------|------------|--------|-------------|--------------|
| Triasulfuron | 82097-50-5 | 75 | not set | not set |
| Other non hazardous ingredients | secret | to 100 | not set | not set |

This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other non hazardous ingredients are also possible.

The TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. The STEL (Short Term Exposure Limit) is an exposure value that should not be exceeded for more than 15 minutes and should not be repeated for more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak "is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.

Section 3 - Hazards Identification

Risk Phrases: Not Hazardous - No criteria found. **Safety Phrases:** Not Hazardous - No criteria found.

SUSDP Classification: None allocated.

ADG Classification: None allocated. Not a Dangerous Good.

UN Number: None allocated

Emergency Overview

Physical Description & colour: Off white granules.

Odour: Mild, non-specific odour.

Major Health Hazards: No major health hazards are known.

Potential Health Effects

Inhalation

Short term exposure: Available data indicates that this product is not harmful.

Long term inhalation of high amounts of any nuisance dust may overload lung clearance mechanism.

Long Term exposure: No data for health effects associated with long term inhalation.

Skin Contact:

Short term exposure: Available data shows that this product is not harmful.

Long Term exposure: No data for health effects associated with long term skin exposure.

Eye Contact:

Short term exposure: This product may be irritating to eyes, but is unlikely to cause anything more than mild

transient discomfort.

Long Term exposure: No data for health effects associated with long term eye exposure.

MATERIAL SAFETY DATA SHEET

Page: 2 of 5

This revision issued: June, 2002

Ingestion:

Short term exposure: This product may be irritating to mucous membranes but is unlikely to cause anything more than mild transient discomfort.

Long Term exposure: No data for health effects associated with long term ingestion.

Carcinogen Status:

NOHSC: No significant ingredient is classified as carcinogenic by NOHSC.

NTP: No significant ingredient is classified as carcinogenic by NTP. **IARC:** No significant ingredient is classified as carcinogenic by IARC.

Section 4 - First Aid Measures

General Information:

You should call The Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 13 1126 from anywhere in Australia and is available at all times. Have this MSDS with you when you call.

Inhalation: First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

Skin Contact: First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

Eye Contact: Do not allow victim to rub eye(s). Let the eye(s) water naturally for a few minutes. Have victim look right and left, then up and down. If particle or dust does not dislodge, flush with lukewarm, gently flowing water for 5 minutes or until it is removed, while holding eyelid(s) open. If irritation persists, obtain medical attention. DO NOT attempt to manually remove anything stuck to the eye.

Ingestion: First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

Section 5 – Fire Fighting Measures

Fire and Explosion Hazards: There is no risk of an explosion from this product under normal circumstances if it is involved in a fire.

Fire decomposition products from this product may be toxic if inhaled. Take appropriate protective measures.

Extinguishing Media: Preferred extinguishing media are carbon dioxide, dry chemical, foam, water fog.

Fire Fighting:

Flash point: Not flammable.

Upper Flammability Limit: No data.

Lower Flammability Limit: No data.

Autoignition temperature: No data.

Flammability Class: No data.

Section 6 – Accidental Release Measures

Accidental release: Minor spills do not normally need any special cleanup measures. In the event of a major spill, prevent spillage from entering drains or water courses. As a minimum, wear overalls, goggles and gloves. Suitable materials for protective clothing include cotton, rubber, PVC. Stop leak if safe to do so, and contain spill. Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage, and dispose of promptly. After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. Full details regarding disposal of used containers, spillage and unused material may be found on the label. If there is any conflict between this MSDS and the label, instructions on the label prevail. Ensure legality of disposal by consulting regulations prior to disposal.

Section 7 – Handling and Storage

Handling: Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. Check Section 8 of this MSDS for details of personal protective measures, and make sure that those measures are followed. The measures detailed below under "Storage" should be followed during handling in order to minimise risks to persons using the product in the workplace. Also, avoid contact or contamination of product with incompatible materials listed in Section 10.

Storage: Make sure that containers of this product are kept tightly closed. Make sure that the product does not come into contact with substances listed under "Materials to avoid" in Section 10. Check packaging - there may be further storage instructions on the label.

Section 8 Exposure Controls and Personal Protection

The following Australian Standards will provide general advice regarding safety clothing and equipment:

MATERIAL SAFETY DATA SHEET

Page: 3 of 5

This revision issued: June, 2002

Respiratory equipment: AS/NZS 1715, Protective Gloves: AS 2161, Industrial Clothing: AS2919, Industrial Eye

Protection: AS1336 and AS/NZS 1337, Occupational Protective Footwear: AS/NZS2210.

Exposure Limits TWA (mg/m³) STEL (mg/m³)

Exposure limits have not been established by NOHSC for any of the significant ingredients in this product.

The ADI for Triasulfuron is set at 0.005mg/kg/day. The corresponding NOEL is set at 0.5mg/kg/day. ADI means Acceptable Daily Intake and NOEL means No-observable-effect-level. Values taken from Australian ADI List, January 2001.

Ventilation: No special ventilation requirements are normally necessary for this product. However make sure that the work environment remains clean and that dusts are minimised.

Eye Protection: Eye protection such as protective glasses or goggles is recommended when this product is being used.

Skin Protection: The information at hand indicates that this product is not harmful and that normally no special skin protection is necessary. However, we suggest that you routinely avoid contact with all chemical products and that you wear suitable gloves (preferably elbow-length) when handling this product.

Protective Material Types: We suggest that protective clothing be made from the following materials: cotton, rubber, PVC.

Respirator: If there is a significant chance that dusts are likely to build up in the area where this product is being used, we recommend that you use a Dust Mask. Otherwise, not normally necessary.

Section 9 - Physical and Chemical Properties:

Physical Description & colour: Off white granules. **Odour:** Mild, non-specific odour.

Boiling Point: No specific data. Expected to decompose before boiling.

Freezing/Melting Point: No specific data. Solid at normal temperatures.

Volatiles: No data.
Vapour Pressure: No data.
Vapour Density: No data.

Specific Gravity: No data. Bulk density about 0.5 **Water Solubility:** Wettable; forms suspensions.

pH: No data.
Volatility: No data.
Odour Threshold: No data.
Evaporation Rate: No data.
Coeff Oil/water distribution: No data
Autoignition temp: No data.

Section 10 - Stability and Reactivity

Reactivity: This product is unlikely to react or decompose under normal storage conditions. However, if you have any doubts, contact the supplier for advice on shelf life properties.

Conditions to Avoid: This product should be kept in a cool place, preferably below 30°C.

Incompatibilities: strong oxidising agents.

Fire Decomposition: Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Nitrogen and its compounds, and under some circumstances, oxides of nitrogen. Occasionally hydrogen cyanide gas. Oxides of sulfur (sulfur dioxide is a respiratory hazard) and other sulfur compounds. Most will have a foul odour. Water. Carbon monoxide poisoning produces headache, weakness, nausea, dizziness, confusion, dimness of vision, disturbance of judgment, and unconsciousness followed by coma and death. Hydrogen cyanide poisoning signs and symptoms are weakness, dizziness, headache, nausea, vomiting, coma, convulsions, and death. Death results from respiratory arrest. Hydrogen cyanide gas acts very rapidly; symptoms and death can both occur quickly.

Polymerisation: This product is unlikely to undergo polymerisation processes.

Section 11 – Toxicological Information

Local Effects:

Target Organs: There is no data to hand indicating any particular target organs.

Classification of Hazardous Ingredients

Ingredient Risk Phrases

Triasulfuron: LD₅₀ Oral, Rat >5000mg/kg LD₅₀ Oral, Mouse = >5000mg/kg

MATERIAL SAFETY DATA SHEET

Product Name: Sipgran 750 WG Page: 4 of 5

This revision issued: June, 2002

 LD_{50} Dermal, Rat = >2000mg/kg LC_{50} Inhalation, Rat = >5.18mg/L/4hr

Section 12 - Ecological Information

Triasulfuron technical is practically non-toxic to birds, bees and fish.

This product is biodegradable. It will not accumulate in the soil or water or cause long term problems.

Birds: LD₅₀ duck: >2150mg/kg LD₅₀ quail: >2150mg/kg **Fish:** LC₅₀ bluegill sunfish, carp, catfish, sheepshead minnow: >100mg/L

Bees: $LD_{50} > 100 \mu g/bee$ Daphnia: $EC_{50} 100 m g/L$

Worms: LD₅₀ (Worm) 1000mg/kg

Environmental fate:

Mainly excreted in urine in unchanged form.

In wheat, metabolism is by oxidation (para to the sulfonyl urea bridge), followed by conjugation of various hydroxy metabolites with glucose. DT_{50} in forage is about 3 days. In straw and grain, no residues were detectable at harvest time

Soil/Environment: The degradation behaviour in soil is determined by the soil type, pH, and especially temperature and moisture content. Field studies with silty loam, clay loam and sandy loam showed a median DT_{50} of 19 days, depending on soil type.

Section 13 – Disposal Considerations

Disposal: Instructions concerning the disposal of this product and its containers are given on the product label. These should be carefully followed.

Section 14 – Transport Information

ADG Code: This product is not classified as a Dangerous Good. No special transport conditions are necessary unless required by other regulations.

Section 15 – Regulatory Information

AICS: All of the significant ingredients in this formulation are to be found in the public AICS Database.

Section 16 – Other Information

This MSDS contains only safety-related information. For other data see product literature.

Acronyms:

ADG Code Australian Code for the Transport of Dangerous Goods by Road and Rail

AICS Australian Inventory of Chemical Substances
CAS number Chemical Abstracts Service Registry Number

Hazchem Number Emergency action code of numbers and letters that provide information to

emergency services especially firefighters International Agency for Research on Cancer

IARC International Agency for Research on Cancer
NOHSC National Occupational Health and Safety Commission

NOS Not otherwise specified

NTP National Toxicology Program (USA)

R-Phrase Risk Phrase

SUSDP Standard for the Uniform Scheduling of Drugs & Poisons

UN Number United Nations Number

Contact Points: AUSTRALIA

Police and Fire Brigade: Dial 000

If ineffective: Dial 1100 (Exchange)
For emergency response: Dial 1800 033 111

National Poisons Information Centre: Dial 13 1126 (from anywhere in Australia)

Please read all labels carefully before using product.

This MSDS summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products.

MATERIAL SAFETY DATA SHEET

Page: 5 of 5

This revision issued: June, 2002

Phone: (03)5223 3746

If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company. The responsibility for products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available on request.

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