

## Safety Data Sheet: Chitinex

### 1. IDENTIFICATION

<b>Product Name:</b>	Chitinex
<b>Other Names:</b>	None
<b>Recommended Use:</b>	Insect Growth Regulator
<b>Distributor:</b>	Key Industries Ltd
<b>Address:</b>	PO Box 65 070 Mairangi Bay, Auckland 0754
<b>Telephone:</b>	09 917 1791
<b>Emergency Phone:</b>	027 4941659
<b>National Poisons Centre:</b>	0800 764 766

### 2. HAZARDS IDENTIFICATION

**Signal Word:** WARNING

**Hazards:**

Eye irritation category 2  
Skin sensitization category 1

STOT (repeated exposure) category 2  
Aquatic Chronic 2  
Hazardous to terrestrial invertebrates

**Hazard Phrases**

Causes serious eye irritation.  
May cause an allergic skin reaction.  
May cause damage to organs through prolonged or repeated exposure.  
Toxic to aquatic life with long lasting effects.

**Precautionary Phrases:**

Read label before use.  
Do not breathe vapours/spray.  
Contaminated work clothing should not be allowed out of the workplace.  
Wash any areas of the body that have come into contact thoroughly after handling.  
Wear protective gloves/eye protection/face protection.  
IF ON SKIN: Wash with plenty of soap and water.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
Get medical advice/attention if you feel unwell.  
If skin irritation or rash occurs: Get medical advice/attention.  
If eye irritation persists: Get medical advice/attention.  
Take off contaminated clothing and wash before re-use.  
Collect spillage.  
Dispose of contents/container in accordance with local/regional/national/international regulations  
Take all reasonable steps to ensure that the substance does not cause any significant adverse effects to the environment beyond the application area  
Do not apply substance to plants if bees are foraging; or the plants are in flower or part flower  
Do not apply directly into or onto water

**Pictograms:**



### 3. COMPOSITION: Information on Ingredients

Ingredient	CAS Number	Concentration (%w/w)
Triflumuron	64628-44-0	4.7
1,2-benzisothiazol-3(2H)-one	2634-33-5	<0.1
2-methyl-2H-isothiazol-3-one	2682-20-4	<0.1
Propylene Glycol	57-55-6	<10.0
Alcohols, ethoxylated	68439-46-3	<10.0
Balance – Proprietary ingredients of low hazard	Proprietary	To 100%

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### 4. FIRST AID MEASURES

Consult the National Poisons Information Centre 0800 POISON (0800 764 766) or a doctor in every case of suspected chemical poisoning. Never give fluids or induce vomiting if a patient is unconscious or convulsing regardless of cause of injury. If breathing difficulties occur seek medical attention immediately.

#### **Swallowed**

If swallowed, do not induce vomiting. Begin artificial respiration if the victim is not breathing. Use mouth to nose rather than mouth to mouth. Obtain medical attention.

#### **Skin Contact**

Remove contaminated clothing and shoes and wash skin with plenty of soap and water. DO NOT scrub the skin. Wash clothing before reuse. Destroy contaminated shoes and other contaminated leather articles such as belts and watchbands. Seek medical attention if symptoms persist.

#### **Eye Contact**

Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Remove contact lenses if present and easy to do and continue rinsing. Do NOT allow victim to rub eyes or keep eyes closed. Obtain medical attention if symptoms persist.

#### **Inhalation**

Move the victim to fresh air immediately. Begin artificial respiration if breathing has stopped. Obtain medical attention immediately.

#### **First Aid facilities**

Provide eye baths and safety showers close to areas where exposure may occur.

#### **Medical Attention**

Treat symptomatically and supportively, monitoring the development of hypersensitivity reactions with respiratory distress. No known antidote. In all cases consult the National Poisons Centre for the most up to date treatment information.

### 5. FIRE FIGHTING MEASURES

Shut off product that may 'fuel' a fire if safe to do so. Allow trained personnel to attend a fire in progress, providing fire fighters with this Safety Data Sheet. Prevent extinguishing media from escaping to drains and waterways.

#### **Suitable extinguishing media**

Water fog, fine spray, foam, dry chemical powder or carbon dioxide. Do not use water stream directly as this may spread fire or give a violent steam eruption. Cool fire exposed container with water spray.

#### **Hazards from combustion products**

Burning chemicals may produce by-products more toxic than the original material. Decomposition from combustion may emit acrid smoke and toxic fumes containing carbon oxides, nitrogen oxides, hydrogen fluoride, hydrogen chloride.

#### **Precautions for fire fighters and special protective equipment**

Full protective clothing with chemical goggles, butyl or neoprene gloves and self-contained breathing apparatus

#### **Hazchem Code**

2Z

#### **Flash Point**

>100°C

### 6. ACCIDENTAL RELEASE MEASURES

#### **Emergency Procedures**

Prevent product from escaping to drains and waterways. Contain leaking packaging in a containment vessel or bunded area. Prevent any vapours or dust from building up in confined areas. Ensure that drain valves are closed at all times. Clean up minor spills immediately.

#### **Methods and materials for containment for a major spill**

Eliminate sources of ignition. Warn occupants of downwind areas of possible hazards. Keep the public away from the area. Prevent product from entering sewers, watercourses, or low-lying areas. Shut off the source of the spill if safe to do so. Advise relevant authorities if substance has entered a watercourse or sewer or has contaminated soil or vegetation. Take measures to minimise the effect on the groundwater. If possible recover product using a pump paying attention to flammability hazards or absorbent material. Collect and seal in properly labelled containers for disposal. Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations. In

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all instances due consideration must be given for First Aid Measures (Section 4), PPE requirements (Section 8), Stability and Reactivity (Section 10) for this material.

### 7. HANDLING AND STORAGE

#### Precautions for safe handling

Keep out of reach of children. Keep containers closed. Avoid sources of ignition including smoking. Use only in well-ventilated areas. When handling do not eat, drink or smoke. Wash hands thoroughly after handling. Wash clothing separately before reuse.

#### Conditions for safe storage

Store in a cool, dry place away from direct sunlight. Keep away from heat and ignition sources. Store in original containers. Protect from physical damage to prevent accidental release. Do not store with food, feedstuffs, fertilizers and seeds.

#### Incompatible materials

None known.

#### Fire Extinguisher Requirements

No specific requirements.

### 8. EXPOSURE CONTROLS: Personal Protection

#### Exposure Limits

A WES has been set by MBIE for a material in this product, propane-1,2 diol (propylene glycol). The WES for propylene glycol is TWA (vapour and particulates) 150ppm or 474 mg/m<sup>3</sup>. TWA (particulates only) 10 mg/m<sup>3</sup>.

#### Engineering Controls:

The use of local exhaust ventilation is recommended to control process emissions near the source. Sufficient ventilation should be provided to keep the solvent in air concentrations below any relevant exposure limit. Provide mechanical ventilation of confined spaces.

#### Hygiene Controls:

Facilities storing or utilising this material should be equipped with an eyewash facility, safety shower and facility for washing hands/face after work.

#### Personal Protective Equipment

**Respiratory Protection:** An approved half/full face filter respirator for organic vapours and particulates is recommended when applying this product. When spraying Carbodox below 1m height use a P2 disposable facemask as minimum respiratory protection

**Eye protection:** Always use safety glasses or a chemical goggles when handling this product. Contact lenses may absorb and concentrate irritants, glasses are recommended.

**Skin/ Body Protection:** Always wear long sleeves and long trousers or coveralls, and enclosed footwear of safety boots when handling this product. It is recommended that chemical resistant gloves (eg nitrile, neoprene) be worn when handling this product.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	White opaque liquid
<b>Odour:</b>	Characteristic odour
<b>Odour Threshold:</b>	No data available
<b>Boiling Point (°C):</b>	Approximately 100
<b>Boiling Point Range</b>	No data available
<b>Melting Point (°C):</b>	Not applicable
<b>Flash Point (°C):</b>	>100
<b>Lower Explosive Limit, LEL (%):</b>	No data available
<b>Upper Explosive Limit, UEL (%):</b>	No data available
<b>SG/ Density, 20°C (g/mL):</b>	1.00 – 1.05
<b>Vapour Pressure, 20°C (kPa):</b>	No data available
<b>Vapour Density:</b>	No data available
<b>Alkalinity/ acidity as pH:</b>	5.0 – 7.0
<b>Solubility in water:</b>	Forms a suspension

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<b>Partition Coefficient (Kow):</b>	Log P 4.9 (triflumuron active ingredient)
<b>Auto-ignition Temperature (°C):</b>	No data available
<b>Decomposition Temperature (°C):</b>	No data available
<b>Kinematic Viscosity:</b>	No data available

### 10. STABILITY AND REACTIVITY

#### **Chemical stability**

Stable at room temperature and pressure.

#### **Hazardous decomposition products**

Decomposition from combustion may emit acrid smoke and toxic fumes containing carbon oxides, nitrogen oxides, hydrogen chlorides and hydrogen fluorides.

#### **Specific Materials to Avoid**

Strong acids, alkalis, oxidising agents, reducing agents and heat.

#### **Hazardous Polymerisation**

Not known to occur.

### 11. TOXICOLOGICAL INFORMATION

#### **Acute Effects**

**Ingestion:** Low toxicity if swallowed. Exposure may result in such nonspecific symptoms as headache, dizziness, weakness, and nausea if ingested.

**Eye Contact:** The liquid may cause eye irritation. Avoid eye contact

**Skin Contact:** Contact with the skin may result in temporary mechanical irritation and may cause an allergic skin reaction in susceptible persons. Avoid skin contact.

**Inhalation:** The vapour/mist may be discomforting to the upper respiratory tract and lungs. Acute effects from inhalation of high vapour concentrations may cause effects similar to that of ingestion.

#### **Chronic Effects**

Repeated skin contact may cause sensitisation. Persons with pre-existing conditions are advised to limit or avoid product contact.

#### **Other Health Effects Information**

Not Available.

#### **Toxicological Information**

Oral LD<sub>50</sub>: >5000 mg/kg (rat), triflumuron active ingredient; >23,500 mg/kg (product, estimated)

Dermal LD<sub>50</sub>: >5,000 mg/kg (rat), triflumuron active ingredient; >65,000 mg/kg (product, estimated)

Inhalation LC<sub>50</sub>: >5.0 mg/L (rat), triflumuron active ingredient; >80 mg/L (product, estimated)

### 12. ECOLOGICAL INFORMATION

#### **Ecotoxicity**

This product is harmful to the environment, with the potential to result in irreparable and irreversible effects. See hazard classifications in section 2 of this document. No specific ecological data available on this product.

**Persistence/ Biodegradability:** log P: 4.9. This substance (triflumuron) is regarded as potentially bioaccumulative with low persistence.

**Mobility:** This product is not readily soluble with water limiting its mobility in the environment. This product is likely to have low mobility in the environment and low leaching potential.

#### **Aquatic Toxicity:**

Fish toxicity LC<sub>50</sub>: >320 mg/L; triflumuron active ingredient,

Daphnia Magna EC<sub>50</sub>: 0.225 mg/L; triflumuron active ingredient

Algae EC<sub>50</sub>: >25 mg/L; triflumuron active ingredient

Honey Bees: >200 µg/organism; triflumuron active ingredient

### 13. DISPOSAL CONSIDERATIONS

#### **Product Disposal**

Dispose of product only by using according to label or using an approved waste disposal contractor. If this material as supplied becomes a waste care should be taken to ensure compliance with national and local authorities. It is the

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responsibility of the waste generator to determine the toxicity and physical properties of the waste generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Do not dispose of via municipal sewers, drains, natural streams or rivers

### **Packaging Disposal**

Triple rinse container and add rinsate to the spray tank. Empty packaging should be taken for recycling, recovery or disposal through a suitably qualified or licensed contractor. Care should be taken to ensure compliance with national and local authorities. Packaging may still contain product residue that may be harmful. Incinerate via approved incinerators or crush and bury in an approved landfill. Ensure that empty packaging is managed in accordance with and HSNO regulations.

## 14. TRANSPORT INFORMATION

**UN No:** Not a DG for transport

## 15. REGULATORY INFORMATION

**Country/ Region:** New Zealand

**ACVM Approval Number:** Not applicable

**EPA Approval Number:** HSR008007

**HSNO Controls:** Trigger Quantities for this Material:

- Certified Handler Test Certificate: Not Required
- Location Compliance Certificate: Not Required
- Hazardous Atmosphere Zone: Not Required
- Signage, Emergency Plan, Secondary Containment: 1000 L
- Tracking: Not required
- Record Keeping: Not required

The trigger quantities above must take into account any other hazardous substance that is present at that location. This represents a partial list of the controls for this material. Contact Key Industries Ltd a full list of HSNO controls.

## 16. OTHER INFORMATION

### **Reasons for Issue:**

New SDS.

### **Abbreviations:**

TWA - the highest allowable exposure concentration in an eight-hour day for a five-day working week

STEL - maximum allowable exposure concentration at any time

CAS Number: Chemical Abstracts Number

EPA: Environmental Protection Authority of New Zealand

HSNO: Hazardous Substances and New Organisms

### **References:**

- EPA Chemical Classification Information Database
- PPDB Pesticides Database
- Supplier SDS

The information sourced for the preparation of this document was correct and complete at the time of writing to the best of the suppliers knowledge. 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. The document represents the commitment to the company's responsibilities surrounding the supply of this product, undertaken in good faith. This document should be taken as a safety guide for the product and its recommended uses, but is in no way an absolute authority. Please consult the relevant legislation and regulations governing the use and storage of this type of product. For further information, please contact Key Industries Limited.