



SAFETY DATA SHEET

TALENT™

SECTION 1: Identification of the substance and supplier

Product name: TALENT
Recommended Use: Horticultural insecticide

Company: Grosafe Chemicals Ltd.
Address: 20 Jean Batten Drive, Mt Maunganui 3116 (P.O. Box 14450 Tauranga 3143)
Email: enquiries@Grosafechemicals.co.nz
Telephone Toll Free Number:
Emergency Telephone Number: 0800 CHEMCALL (0800 243622)
(EMERGENCIES ONLY)

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SECTION 2: Hazards Identification

EMERGENCY OVERVIEW

Classified as Hazardous.

Classified as Dangerous Goods for transport.

HSNO Hazard Classification: 9.1C,

Hazards:

Toxic to aquatic life with long lasting effects.

Very toxic to terrestrial invertebrates.

Response:

Collect spillage.

SECTION 3: Composition/information on ingredients

<u>Ingredients</u>	<u>CAS Number</u>	<u>Content</u>
methoxyfenozide	161050-58-4	~ 22.6 %
propylene glycol	57-55-6	~ 10 %
Balance - Ingredients not contributing to hazards		65-75%

SECTION 4: First Aid Measures

In case of poisoning by any route contact a doctor or Poisons Information Centre.

Swallowed: If large quantities are ingested, drink plenty of water. Do not induce vomiting. Immediately contact a doctor or Poisons Information Centre.

Eye: Flush eyes with large quantities of water for 15 minutes. Seek medical advice.

Skin: If contact occurs remove contaminated clothing and wash affected areas thoroughly with soap and water. Consult a doctor if irritation persists.

Inhaled: Move affected person to fresh air and keep at rest until recovered.

Advise to Doctor: No specific antidote is available. If poisoning is suspected apply symptomatic therapy. Gastric lavage should be considered for significant ingestions within the first 2 hours. Administration of activated charcoal and sodium sulphate. Contact Poisons Information Centre (0800 POISON (0800 764 766) for more information.

SECTION 5: Fire Fighting Measures

Dangerous Goods Class:	None allocated
Extinguishing media:	Fine water spray or foam.
Unsuitable extinguishing media:	None
Special exposure hazards:	None
Fire and Explosive Properties:	May form hazardous decomposition products
Flammability:	Non-flammable

SECTION 6: Accidental Release Measures

In Case of Spill or Leak: Control the spill at its source. Contain the spill to prevent it from spreading, contaminating soil, or entering sewage and drainage systems or any body of water. Clean up spills immediately, observing precautions outlined in Section 8. Cover entire spill with absorbing material and place into compatible disposal container. Scrub area with water plus detergent. Pick up wash liquid with additional absorbent and place into compatible disposal container. Once all material is cleaned up and placed in a disposal container, seal container and arrange for disposal.

SECTION 7: Handling and Storage

Store the material in a well-ventilated, secure area out of reach of children and domestic animals. Do not store with food or drink. Wash thoroughly with soap and water after handling.

SECTION 8: Exposure Control/Personal Protection

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION, PACKAGING, TRANSPORT AND STORAGE OF THIS PRODUCT.

FOR COMMERCIAL APPLICATIONS OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.

Ingestion: Prevent eating, drinking, tobacco use and cosmetic application in areas where there is a potential for exposure to the material, Wash thoroughly with soap and water after handling.

Eye Contact: Where eye contact is likely, use chemical splash goggles. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Skin Contact: Where contact is likely, wear chemical-resistant (such as nitrile or butyl) gloves, coveralls, socks and chemical-resistant footwear. For overhead exposure, wear chemical-resistant headgear.

Inhalation: Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below exposure limits.

SECTION 9: Physical and Chemical Properties

Appearance:	Colourless Liquid
Odour:	Mild
pH:	ca. 7.0
Boiling Point:	ca. 100 °C.
Flammable (Explosive) Limits:	Non flammable
Explosive Properties:	Not explosive
Oxidizing Properties:	Not an oxidizing agent
Vapour Pressure:	Not known for product. Methoxyfenozone 17 mm Hg @ 20°C (Water)
Relative density:	1.15 – 1.2 g/cm ³
Solubility:	Dispersal in water

SECTION 10: Stability and Reactivity

Stability:	Stable
Conditions to avoid:	Extreme heat / freezing
Materials to avoid:	Acids / alkalis
Hazardous Decomposition Products:	May be formed at high temperatures
Hazardous Polymerisation:	Will not occur

SECTION 11: Toxicological Information

POTENTIAL HEALTH EFFECTS: This section includes possible adverse effects, which could occur if this material is not handled in the recommended manner.

EYE: Essentially non-irritating to eyes.

SKIN: Brief contact is essentially non-irritating to skin. Did not cause allergic skin reactions when tested in guinea pigs. Prolonged skin contact is unlikely to result in absorption of harmful amounts. The LD50 for skin absorption in rats is > 2000 mg/kg.

INGESTION: Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts. The oral LD50 for rats and mice is >5000 mg/kg.

INHALATION: At room temperature, exposure to vapour is minimal due to low volatility. The aerosol LC50 for rats is >0.9 mg/L for 4 hours. Mist may cause irritation of upper respiratory tract (nose and throat).

SYSTEMIC (OTHER TARGET ORGAN) EFFECTS: For methoxyfenozone, excessive exposure may cause methemoglobinemia, thereby impairing the blood's ability to transport oxygen. In animals, effects have been reported on the following organs: blood, liver, kidney, and thyroid. In rare cases, repeated excessive exposure to propylene glycol may cause central nervous system effects.

CANCER INFORMATION: The major component(s) did not cause cancer in laboratory animals.

TERATOLOGY (BIRTH DEFECTS): The major component(s) did not cause birth defects or any other fetal effects in laboratory animals.

REPRODUCTIVE EFFECTS: The major component(s), in animal studies, did not interfere with reproduction.

MUTAGENICITY (EFFECTS ON GENETIC MATERIAL): In-vitro and animal genetic toxicity studies were negative.

SECTION 12: Environmental Information

ENVIRONMENTAL FATE: No relevant information found.

ECOTOXICOLOGY: Based largely or completely on information for methoxyfenozone:

Material is moderately toxic to aquatic organisms on an acute basis (LC50/EC50 between 1 and 10 mg/L in most sensitive species tested.) NZ EPA has classified this substance as 9.1B.

Material is practically non-toxic to birds on an acute basis (LD50 > 2000 mg/kg).

Material is practically non-toxic to birds on a dietary basis (LC50 > 5000 ppm).

Prodigy is highly toxic to insects. NZ EPA has classified this substance as 9.4A.

SECTION 13: Disposal Considerations

DISPOSAL METHOD: If wastes and/or containers cannot be disposed of according to the product label directions, disposal of this material must be in accordance with your local or area regulatory authorities. This information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste.

identification and disposal methods in compliance with applicable regulations. If the material as supplied becomes a waste, follow all applicable regional, national and local laws and regulations.

SECTION 14: Transport Information

PUBLIC PASSENGER VEHICLE TRANSPORT: To be transported **ONLY** in the sealed original container.

Maximum volume permitted to be transported is: Not limited

DANGEROUS GOODS CLASSIFICATION

UN No: 3082

Class: 9

Packing group: III

SHIPPING NAME: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(METHOXYFENOZIDE)

IMDG

Not regulated

ICAO/IATA

Not regulated

Compliance with the above requirements is deemed to comply with the applicable requirements of the Hazardous substances Identification and Emergency Management Regulations.

SECTION 15: Regulatory Information

ACVM APPROVAL NUMBER: P9060

EPA New Zealand Approval Code: HSR100924

SECTION 16: Other Information

A2: NZ OSH carcinogenicity classification. *Suspected Human Carcinogen* The A2 carcinogen rating is used primarily when there is limited evidence of carcinogenicity in humans and sufficient evidence of carcinogenicity in experimental animals with relevance to humans.

ACGIH: American Conference of Governmental Industrial Hygienists.

BAc: Butyl acetate. Evaporation rate is an important factor in evaluating health and fire hazard of the named chemical—a fast evaporation rate generally indicates a high health, fire, and/or explosion risk. Slow = $<0.8 \times \text{BAc}$; medium = $0.8\text{-}3 \times \text{BAc}$; Fast = $>3 \times \text{BAc}$

BCF: Bioconcentration Factor - a measure for the characterization of the accumulation of a chemical in an organism. It is defined as the concentration of a chemical in an organism (plants, microorganisms, animals) divided by the concentration in a reference compartment (e.g. food, surrounding water).

Industrial Hygiene Guideline: An internal company standard based on an 8 hour TWA.

EC50: median effective concentration. Statistically derived concentration of a substance in an environmental medium expected to produce a certain effect in 50% of test organisms in a given population under a defined set of conditions.

EEL: Environmental exposure standard set by NZ EPA

Explosive Limits: The range of concentrations (% by volume in air) of a flammable gas or vapour that can result in an explosion for ignition in a confined space.

Koc: the organic carbon partition coefficient (mL soil water /g organic carbon).

Kow: See Pow

LC50: Lethal Concentration 50%. A concentration of chemical in air or water that will kill 50% of the test organisms.

LD50: Lethal Dose-50%. The doses of a chemical that will kill 50% of the test animals receiving it.

NIOSH: American national Institute of Occupational Safety and Health, a federal agency which conducts research on occupational safety and health questions and recommends new standards.

OSH: Occupational Safety and Health Service of The Department of Labour, New Zealand.

OSHA: American Occupational Safety and Health Administration.

PEL: Permissible Exposure Level, a maximum allowable exposure level by law.

pH: Measure of how acidic or alkaline a material is using a 1 - 14 scale. pH 1 is strongly acidic and pH 14 strongly alkaline.

Polymerisation: a chemical reaction in which small molecules (monomers) combine to form much larger molecules (polymers). A hazardous polymerisation reaction is one that occurs at a fast rate and releases large amounts of energy.

Pow: The octanol-water partition coefficient is the ratio of the concentration of a chemical in octanol and in water at equilibrium and at a specified temperature. Octanol is an organic solvent that is used as a surrogate for natural organic matter. This parameter is used in many environmental studies to help determine the fate of chemicals in the environment.

Skin: A 'skin' notation following the exposure guideline refers to the potential for dermal absorption of the material including mucous membranes and the eyes either by contact with vapors or by direct skin contact. It is intended to alert the reader that inhalation may not be the only route of exposure and that measures to minimize dermal exposures should be considered.

STEL: Short-Term Exposure Limit. A term used to indicate the maximum average concentration allowed for a continuous 15 minute exposure period.

TEL: Tolerable Exposure Limit set by NZ EPA

TVL: Threshold Limit Value, an exposure limit set by a competent authority

TWA: Time Weighted Average. The average concentration of a chemical in air over the total exposure time - usually an 8-hour workday.

WES: Work place exposure standard set by NZ EPA or OSH.

References

AS/NZS 1715-1994 Selection Use and Maintenance of Respiratory Protective Devices.

ASNZS 1716 - 1994 Respiratory protective devices.

A guide to Respiratory Protection (published by the Occupational Safety and Health Service with support of NZ Safety Ltd 1999

Guidelines for Personal Protection for Agrichemical Users NZ Safety Limited.

Environmental Risk Management Authority Decision for NZ EPA Approval Code (Refer to Section 15).

Land Transport Rule 45001/1: Dangerous Goods 2005 and its amendments.

International Maritime Dangerous Goods Code (IMDG)

Maritime Rule 24A Carriage of Cargoes-Dangerous Goods

International Air Transport Association (IATA) Dangerous Goods Regulation.

Note: The information contained herein is given in good faith, but no warranty, expressed or implied, is made. Consult Grosafe Chemicals Ltd. for further information.