

Infosafe No™ 3NUEZ	Issue Date : June 2017	ISSUED by NUFARMNZ
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 Product Name **HORNET® 430SC**

1. Identification

GHS Product Identifier	HORNET® 430SC
Product Code	02708
Product Type	Fungicide
Company Name	Nufarm NZ
Address	6 Manu Street, Otahuhu Auckland 2024 New Zealand
Telephone/Fax Number	Tel: 0-9-270 4150 Fax: 0-9-270 4159
Emergency phone number	0800 651 911
Recommended use of the chemical and restrictions on use	A systemic triazole (DMI) fungicide for the control of diseases in cereals, grass seed crops, peas and onions, for the control of brown rot in stonefruit and to control rust and fusarium in pasture.
Other Information	This SDS describes, to the best of our knowledge, the properties of the concentrated product. The physical properties and some of the assessments do not apply to the properties of the product once it has been diluted for application. Acute health effects of the diluted product are likely to be much less severe.

2. Hazard Identification

Other Information	6.1E acute toxicant, 6.9B target organ toxicant, 9.1A aquatic toxicant, TOXICITY Harmful - may be harmful if swallowed, inhaled or absorbed through the skin. May cause damage to the endocrine system from repeated oral exposure at high doses. ECOTOXIC Very toxic to aquatic organisms with long-lasting effects.
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3. Composition/information on ingredients

Chemical Characterization	Liquid		
Ingredients	<u>Name</u>	<u>CAS</u>	<u>Proportion</u>
	Tebuconazole	107534-96-3	430 g/L
	Ingredients determined to be non-hazardous	-	To volume

4. First-aid measures

First Aid Measures	For advice contact the National Poisons Centre 0800 POISON (0800 764 766) or a doctor immediately. Begin artificial respiration if the victim is not breathing. Use mouth-to-nose rather than mouth-to-mouth. Obtain medical attention.
Inhalation	Remove patient to fresh air. Lay down and keep warm and rested. If breathing is shallow or has stopped ensure airway is clear and apply resuscitation. Seek medical assistance immediately.
Ingestion	Never give anything by mouth to an unconscious person. If swallowed do NOT induce vomiting. For advice, contact the National Poisons Centre (0800 764 766). Seek medical assistance immediately.
Skin	Immediately flush body and clothes with large amounts of water. Remove contaminated clothing and footwear. Wash affected areas with soap and water. If a large area is affected seek medical assistance.
Eye contact	Flush eyes with plenty of water for 15 minutes holding eyelids open if necessary. Remove contact lenses, if present and easy to do. Seek medical assistance even if there are no immediate symptoms.
First Aid Facilities	Facilities storing or utilizing this material should be equipped with an eyewash facility and safety shower.
Advice to Doctor	Treat symptomatically.

5. Fire-fighting measures

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Suitable extinguishing media	If involved in a fire, the product will not burn. Choose extinguishing media to suit the burning material. Water fog, foam, carbon dioxide or dry chemical.
Hazards from Combustion	May emit hazardous smoke and fumes if involved in fires or exposed to extreme heat.
Products	
Special Protective Equipment for fire fighters	Full protective clothing and self-contained breathing apparatus.
Specific Methods	Keep up wind. Do not allow washings to reach sewage or effluent systems.
Specific hazards arising from the chemical	Considered low risk due to water content, however upon evaporation of water the product is combustible.
Hazchem Code	2X
Other Information	Location Certificate: Not applicable Hazardous Atmosphere Zone: Not applicable Number of Fire Extinguishers: Not applicable

6. Accidental release measures

Spills & Disposal	Wear protective clothing. Clear area of unprotected personnel. Contain spill and absorb with sand, soil or absorbent granules. If spill does enter waterways contact the local authority. Collect in an appropriate sealable container for disposal in an approved landfill. Wash area with water and absorb with further inert material and collect in sealable container for disposal.
Personal Protection	For appropriate personal protective equipment (PPE), refer Section 8.
Environmental Precautions	Prevent from entering drains, waterways or sewers.

7. Handling and storage

Precautions for Safe Handling	Avoid skin and eye contact and inhalation of spray mist. APPROVED HANDLER: This product must be under the control of an approved handler during use. TRACKING: Is not required RECORD KEEPING: Records of use as described in NZS 8409 Management of Agrichemicals must be kept if 3L or more is applied within 24 hours.
Conditions for safe storage, including any incompatibilities	Keep out of reach of children. Store in original container tightly closed and in a locked, dry, cool area away from foodstuffs. Storage must be in accordance with NZS 8409 Management of Agrichemicals. Stores containing 100L of HORNET 430SC require secondary containment and are subject to signage, and more than 100L require emergency response plans.
Other Information	Always read the label and any attached leaflet before use. Aggregate Storage Volume Thresholds: When stored with substances of the same hazard classification the aggregate quantity must be considered. For full details refer to the current NZS8409 Management of Agrichemicals and the HSNO Regulations.

8. Exposure controls/personal protection

Occupational exposure limit values	No exposure limits (WES, TEL or EEL's) have been specifically assigned for this product.
Appropriate engineering controls	Handle in well ventilated areas, generally natural ventilation is adequate.
Personal Protective Equipment	When opening the container, preparing spray and using the prepared spray wear safety goggles, impervious gloves, cotton overalls buttoned to the neck and wrist, and boots.
Hygiene Measures	Do not eat, drink or smoke while using. Remove protective clothing and wash hands and face thoroughly before meals and after work. Wash protective clothing daily after work. Wash splashes of concentrate from skin immediately.

9. Physical and chemical properties

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Form	Liquid
Appearance	White liquid
Odour	Slight odour
Solubility in Water	Disperses in water.
Specific Gravity	1.07
pH	6.0 - 8.0 (neat)
Vapour Pressure	1.7 x 10 ⁻³ mPa (20°C for tebuconazole)
Viscosity	2000 cps
Partition Coefficient: n-octanol/water	Kow Log P is 3.7 for tebuconazole
Flammability	Non combustible material.
Other Information	(SC) Suspension Concentrate

10. Stability and reactivity

Chemical Stability	Stable under normal conditions of handling and storage.
Conditions to Avoid	Excessive heat and fire.
Hazardous Polymerization	Not known to occur.

11. Toxicological Information

Toxicology Information	No specific toxicological data is available for this product. Data below is for constituents.
Acute Toxicity - Oral	LD50 (rat, female) 1700 mg/kg for tebuconazole
Acute Toxicity - Dermal	LD50 (rat) >5000 mg/kg for tebuconazole
Acute Toxicity - Inhalation	LC50 (rat) (4hr) >5.1 mg/l for tebuconazole dust
Ingestion	Low toxicity. However, swallowing large amounts of concentrate may cause nausea and vomiting.
Inhalation	Not a likely route of exposure when handling the concentrate. When applying the product as a spray avoid breathing in spray mist.
Skin	May irritate the skin.
Eye	The concentrate may cause irritation of the eyes.
Reproductive Toxicity	Evidence from animal studies suggests the potential for developmental toxicity on repeated or prolonged exposure.
Serious eye damage/irritation	Not an irritant.
Skin corrosion/irritation	Not a skin irritant.
Subchronic/Chronic Toxicity	NOAEL 3mg/kg bw/day in 2 1-year studies in dogs for tebuconazole Target organ - endocrine system
Other Information	The Australian Acceptable Daily Intake (ADI) for tebuconazole for a human is 0.03 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 2.96 mg/kg/day, the level determined to show no effects during long term exposure for the most sensitive indicators and the most sensitive species. (Ref: Comm. Dept. of Health and Ageing, Office of Chemical Safety, 'ADI List', December 2014).

12. Ecological information

Persistence and degradability	Not rapidly degradable DT50 = 866 days anaerobic for tebuconazole DT50 = 1,386 days aerobic for tebuconazole
Bioaccumulative Potential	Not bioaccumulative BCF: whole fish = 78

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Other Precautions	Do not contaminate dams, waterways or sewers with this product or the containers which have held this product.
Environmental Protection	Spray drift should be avoided, read the label for more information.
Basis for Assessment	Data below is for the active ingredient unless otherwise stated.
Acute Toxicity - Fish	LC50 (96hr) for rainbow trout is 4.4 mg/l for tebuconazole
Acute Toxicity - Daphnia	LC50 (48hr) for daphnia is 2.79mg/l for tebuconazole
Acute Toxicity - Algae	EC50 (72h) for Selenastrum capricornutum 3.8 mg/l for tebuconazole. EC50 for duckweed (Lemna gibba) 0.1444mg/l for tebuconazole
Acute Toxicity - Other Organisms	LD50 for bobwhite quail is 1,988 mg/kg for tebuconazole LD50 (contact) >200µg/bee; (oral,48h) 83µg/bee.

13. Disposal considerations

Product Disposal	Dispose of product only by using according to the label, or at an approved landfill.
Container Disposal	Triple rinse empty container and add rinsate to spray tank. Recycle empty container. Otherwise crush and bury in a suitable landfill.

14. Transport information

Transport Information	It is good practice not to transport agricultural chemical products with food, food related materials and animal feedstuffs.
U.N. Number	3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. - (tebuconazole, 43%)
Transport hazard class(es)	9
Hazchem Code	2X
Packaging Method	-
Packing Group	III
EPG Number	-
IERG Number	47
IMO Marine Pollutant	Yes. Environmentally Hazardous Substance mark required.
IMDG EMS	F-A, S-F
Other Information	Do not carry more than 10L of HORNET 430SC on a passenger service vehicle. Segregation: Check the latest Land Transport Rule Dangerous Goods Rule 45001 for additional information. Sea transport may require additional segregation. Refer NZS5433 sea segregation for details.

15. Regulatory information

National and or International Regulatory Information	Registered pursuant to the ACVM Act 1997, No. P7583 See www.foodsafety.govt.nz for registration conditions Approved pursuant to the HSNO Act 1996, Approval Code HSR007675 See www.epa.govt.nz for approval controls.
Packaging & Labelling	HARMFUL * ECOTOXIC - keep out of reach of children
Hazard Rating Systems	NFPA/HMIS: 1-1-1

16. Other Information

Contact Person/Point	IN AN EMERGENCY, DIAL 111 - FIRE OR POLICE 24Hr Tollfree Emergency No: 0800 651 911 24Hr Emergency No: National Poisons Centre Phone: 0800 764 766
Revisions Highlighted	5 yearly review carried out. Various changes and updates made to document.
Other Information	Supersedes SDS issued June 2012



Safety Data Sheet

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