





Infosafe No™ 3NUFB	Issue Date : June 2020	ISSUED by NUFARMNZ
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 Product Name **COUNTER® 20G**

1. Identification

GHS Product Identifier	COUNTER® 20G
Product Code	03406
Product Type	Organophosphate Insecticide
Company Name	Nufarm NZ
Address	6 Manu Street, Otahuhu Auckland 2024 New Zealand
Telephone/Fax Number	Tel: 0-9-270 4150
Emergency phone number	0800 651 911
E-mail Address	nzinfo@nufarm.com
Recommended use of the chemical and restrictions on use	A systemic soil applied granular insecticide for the protection of newly sown pasture, cereals, fodder brassicas, maize and sweetcorn.
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

GHS classification of the substance/mixture	Classified as Dangerous Goods for transport according to the New Zealand Standard NZS 5433:2012 Transport of Dangerous Goods on Land.
Signal Word (s)	DANGER
Hazard Statement (s)	H300 Fatal if swallowed. H310 Fatal in contact with skin. H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage. H330 Fatal if inhaled. H361 Suspected of damaging fertility or the unborn child . H372 Causes damage to organs through prolonged or repeated exposure . H410 Very toxic to aquatic life with long lasting effects. H431 Very toxic to terrestrial vertebrates. H443 Harmful to terrestrial invertebrates.
Precautionary statement – General	P101 If medical advice is needed, have product container or label at hand. P102 Keep out of reach of children. P103 Read label before use.
Pictogram (s)	Corrosion, Skull and crossbones, Health hazard, Environment
	   
Precautionary statement – Prevention	P202 Do not handle until all safety precautions have been read and understood. P260 Do not breathe dust/fume/gas/mist/vapours/spray. P262 Do not get in eyes, on skin, or on clothing. P264 Wash contaminated skin thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves/protective clothing/eye protection/face protection. P281 Use personal protective equipment as required. P284 Wear respiratory protection.

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Precautionary statement – Response	P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P330 Rinse mouth. P321 Specific treatment (see Specific Treatment: Atropine is specific antidote. on this label). P302+P350 IF ON SKIN: Gently wash with plenty of soap and water. P361 Remove/Take off immediately all contaminated clothing. P310 Immediately call a POISON CENTER or doctor/physician. P363 Wash contaminated clothing before reuse. P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P308+P313 IF exposed or concerned: Get medical advice/attention. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P391 Collect spillage.
Precautionary statement – Storage	P403+P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up.
Precautionary statement – Disposal	P501 In the case of a substance that is in compliance with a HSNO approval other than a Part 6A (Group Standards) approval, a label must provide a description of one or more appropriate and achievable methods for the disposal of a substance in accordance with the Hazardous Substances (Disposal) Regulations 2001. This may also include any method of disposal that must be avoided. See Section 13 for disposal details.
Other Information	6.1A acute toxicant, 6.8B reproductive or developmental toxicant, 6.9A target organ toxicant, 8.2C skin corrosive, 8.3A eye corrosive, 9.1A aquatic toxicant, 9.3A terrestrial vertebrate toxicant, 9.4C terrestrial invertebrate toxicant,

3. Composition/information on ingredients

Ingredients	Name	CAS	Proportion
	Terbufos	13071-79-9	200 g/kg
	Ingredients determined to be non-hazardous	-	Balance

4. First-aid measures

First Aid Measures	If swallowed, spilled on skin or in the eyes, or inhaled, and/or if symptoms from exposure are occurring, contact the National Poisons Centre 0800 POISON (0800 764 766) or a doctor immediately. Wear suitable gloves and ensure other skin protection is adequate when attending victims. Wear suitable respiratory protection if there is an exposure risk. An antidote can be medically administered at a health care facility.
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. Repeated inhalation may have a cumulative poisoning effect.
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. Do not scrub the skin. Repeated skin contact may have a cumulative poisoning effect.
Eye contact	If in eyes, hold eyelids apart and flush the eye with continuously running water. Continue flushing until advised to stop by the National Poisons Centre, or for at least 15 minutes.
First Aid Facilities	Facilities storing or utilizing this material should be equipped with an eyewash facility and safety shower.
Advice to Doctor	Initial Treatment: Atropine is the specific antidote. Large amounts are required in organophosphate poisoning. An initial trial dose of atropine 2mg intravenously should be given and repeated every 15 minutes until an atropine effect is noted (dilated pupils, dry mouth, flushing of the skin). Reduce to a schedule that maintains full atropinisation for at least 24 hours. The dose and frequency of atropine will vary from case to case.

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Medical: Take blood samples for cholinesterase levels before starting treatment. Stomach washout if organophosphate has been ingested. Pralidoxime enhances the reactivation of acetyl cholinesterase. It is most effective if given early, but can still be started up to 48 hours after poisoning. Pralidoxime is given at a dose of 1-2mg by slow I.V. infusion at a maximum rate of 0.5gm/min. It is used as an adjunct to, not a replacement for atropine.

Respiratory Difficulty - Carefully monitor for 24 hours.

Convulsions - Control with Diazepam (Valium) 5-10mg by slow I.V. or I.M. repeat as necessary.

Most important symptoms/effects, acute and delayed

Weakness, faintness, giddiness, headache, tightness in chest, blurred vision, non-reactive pinpoint pupils, salivation, sweating, nausea, vomiting, diarrhoea, abdominal cramps, muscle twitching.

5. Fire-fighting measures

Suitable extinguishing media Dry Chemical, foam, Water fog,

Hazards from Combustion Products Thermal decomposition products may include but are not limited to hydrogen sulphide, mercaptans, thiophosphates, non-specified oxides or carbon, phosphorus and sulphur and diakylsulfides.

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. Keep containers cool with water spray.

Specific hazards arising from the chemical Flammable vapour/air mixture may be explosive.

Hazchem Code 2XE

Decomposition Temp. ~120°C at 1 atmosphere

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. Sweep up solids without generating dust (use water to dampen). If spill does enter waterways contact the local authority. Collect in an appropriate sealable container for disposal in an approved landfill.
 Decontaminate spill area with a solution of 10% household bleach, 5% isopropyl alcohol and 85% water. Rinse spill area and tools with the decontamination solution. Contain and absorb this rinsate with inert absorbent granules and place in the same container as the spilled material.

Personal Protection For appropriate personal protective equipment (PPE), refer Section 8.

Environmental Precautions Prevent from entering drains, waterways or sewers.

7. Handling and storage

Handling and Storage Do not handle until all the safety precautions have been read and understood. The person mixing or applying COUNTER 20G must be a 'Qualified Contractor' or 'Qualified Loader'. For more information refer to the Hazardous Substances Property Controls Notice 2017. It is the duty of the PCBU that a person who uses, handles, manufactures or stores a hazardous substance (including hazardous waste) is provided information, instruction and training in accordance with Regulation 4.5 of the Health and Safety at work (Hazardous Substances) Regulations 2017.

Precautions for Safe Handling Remove unprotected persons from the operating area. Avoid contact with skin and eyes and do NOT inhale dust. Do NOT touch or rub eyes, nose or mouth with hand when handling granules. When handling wear cotton overalls buttoned to the neck and wrist (and worn outside boots),

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Conditions for safe storage, including any incompatibilities	<p>washable hat, elbow-length PVC gloves, impervious boots, and a full face respirator with an organic vapour and particulate matter cartridge.</p> <p>CERTIFIED HANDLER: This product must only be applied by a certified handler or under the direct supervision of a certified handler.</p> <p>TRACKING: Location and movement of this product must be recorded at each step of its lifecycle.</p> <p>RECORD KEEPING: Records of use as described in NZS 8409 Management of Agrichemicals must be kept.</p> <p>Remove animals from the operating area. Take precautions to prevent livestock, birds and other wildlife from recovering granules from the soil surface.</p> <p>Keep out of reach of children.</p> <p>Store in original container, tightly closed, in a locked, dry, cool, well ventilated area away from foodstuffs, seeds, feed and fertiliser. Store in accordance with NZS 8409 Management of Agrichemicals.</p> <p>Stores containing 50kg of COUNTER 20G are subject to signage, and more than 100kg require emergency response plans.</p>
Corrosiveness	May cause eye damage or skin burns.
Other Information	<p>Always read the label and any attached leaflet before use.</p> <p>Aggregate Storage Volume Thresholds:</p> <p>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.</p>

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 or using the product wear cotton overalls buttoned to the neck and wrist (and worn outside boots), washable hat, elbow-length PVC gloves, impervious boots, and a full face respirator with an organic vapour and particulate matter cartridge.
Hygiene Measures	<p>Do not eat, drink or smoke while using.</p> <p>Remove protective clothing and wash hands and face thoroughly before meals and after work. Wash protective clothing daily after work.</p>

9. Physical and chemical properties

Form	Solid
Appearance	Grey-brown
Odour	Mercaptan
Decomposition Temperature	~120°C at 1 atmosphere
Melting/Freezing Point	-29°C (for terbufos)
Boiling Point	69°C/0.01mmHg (for terbufos)
Solubility in Water	Negligible
pH	Information not available.
Vapour Pressure	34.6 mPa (25°C) (for terbufos)
Vapour Density (Air=1)	Information not available.
Partition Coefficient: n-octanol/water	Kow logP = 2.77 (for terbufos)
Density	6.88-8.33kg/L
Flash Point	Information not available.

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Flammability	Not flammable.
Auto-Ignition Temperature	Information not available.
Flammable Limits - Lower	Information not available.
Flammable Limits - Upper	Information not available.
Kinematic Viscosity	Information not available.
Other Information	(GR) Granule

10. Stability and reactivity

Chemical Stability	Stable under normal conditions of handling and storage.
Conditions to Avoid	Decomposes on heating. Avoid moisture.
Incompatible Materials	Strong oxidisers, strong acids, and strong alkaline materials. Hydrolysis may occur under alkaline conditions.
Hazardous Polymerization	Hazardous polymerisation will not 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) 1.3 mg/kg for terbufos
Acute Toxicity - Dermal	LD50 (rabbit) 0.8 mg/kg for terbufos
Acute Toxicity - Inhalation	LC50 (rat) 1.7µg/L for terbufos
Skin	May burn the skin.
Eye	Corrosive to eyes.
Respiratory sensitisation	Not a sensitiser.
Germ cell mutagenicity	Information not available.
Carcinogenicity	Information not available.
Reproductive Toxicity	Suspected human reproductive or developmental toxicant.
STOT-repeated exposure	Causes damage to nervous system through prolonged or repeated exposure.
Serious eye damage/irritation	Causes serious eye damage.
Respiratory Irritation	Not an irritant.
Skin corrosion/irritation	Causes severe skin burns.
Subchronic/Chronic Toxicity	LOAEL = 0.01mg/kg bw/day. Neurotoxic.
Other Information	The Australian Acceptable Daily Intake (ADI) for terbufos for a human is 0.0002 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 0.0025 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', March 2020).

12. Ecological information

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Persistence and degradability	Terbufos is persistent. >68days
Mobility	Soil: Oxidative and hydrolytic degradation occurs in soil. No accumulation. DT50 in soil=9-27 d
Bioaccumulative Potential	Information not available.
Basis for Assessment	Ecotoxicological data have not been determined specifically for this product. Data below is for the active ingredient unless otherwise stated.
Acute Toxicity - Fish	LC50 (96hr) for rainbow trout is 0.0067 mg/l for terbufos
Acute Toxicity - Daphnia	LC50 (48hr) for Daphnia magna is 0.00031 mg/l for terbufos.
Acute Toxicity - Other Organisms	LD50 for Northern bobwhite quail is 28.6 mg/kg for terbufos (14d) LD50 (honey bee) (48h) = 4.09µg/bee Due to physical state this product is not expected to be harmful to bees.

13. Disposal considerations

Product Disposal	Dispose of product only by using according to the label, or at an approved landfill.
Container Disposal	Empty bag completely into application equipment, then crush box and bag and bury in an approved landfill. Do not burn empty packaging.

14. Transport information

Transport Information	COUNTER 20G must not be loaded in the same freight container, or on the same vehicle as Class 1 items or foodstuffs.
U.N. Number	2783
UN proper shipping name	ORGANOPHOSPHOROUS PESTICIDE, SOLID, TOXIC - (terbufos, 20%)
Transport hazard class(es)	6.1
Hazchem Code	2XE
Packaging Method	-
Packing Group	I
EPG Number	-
IERG Number	35
IMO Marine Pollutant	Yes. Environmentally Hazardous Substance mark required.
IMDG EMS	F-A, S-A
Other Information	Do not carry this product 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. P3359 See www.foodsafety.govt.nz for registration conditions Approved pursuant to the HSNO Act 1996, Approval Code HSR000216 See www.epa.govt.nz for approval controls.
Hazard Rating Systems	NFPA/HMIS: 4-1-0

16. Other Information

Date of preparation or last revision of SDS	February 2015
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Product Name **COUNTER® 20G**

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 5 yearly review carried out. Various changes and updates made to document.

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