



Infosafe No™ 3NURI Issue Date : March 2014 ISSUED by NUFARMNZ

Product Name **TRIBAL™ GOLD**

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

Product Name TRIBAL™ GOLD
Product Code 00662
Product Use Selective herbicide for controlling broadleaf weeds in new and established pastures.
Company Name Nufarm NZ
Address 6 Manu Street, Otahuhu
Auckland 2024 New Zealand
Emergency Tel. 0800 651 911
Telephone Number/Fax Tel: 0-9-270 4150
Fax: 0-9-270 4159
Product Type Herbicide
Email info@nz.nufarm.com
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. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Characterization Liquid

Ingredients	Name	CAS	Proportion
	MCPB acid (present as the dimethylamine salt)	94-81-5 (acid)	300 g/L
	MCPA (present as the dimethylamine salt)	2039-46-5	20 g/L
	Flumetsulam	98967-40-9	10 g/L
	Water, other ingredients (non-hazardous)		To volume

3. HAZARDS IDENTIFICATION

Health Hazard Acute over exposure: Headache, nausea and vomiting with possible twitches and spasms in extreme cases.

Inhalation Not considered a serious hazard because MCPA and MCPB (dimethylamine salts) are practically non-volatile; however, inhalation of spray mists should be avoided. Inhalation of the spray is harmful.

Ingestion The concentrate is not considered a serious hazard due to moderate toxicity. However, the concentrate is considered harmful if swallowed, when classified according to Worksafe Criteria.

Skin The concentrate may cause irritation and possible damage if contact with the concentrate is prolonged or excessive. Some absorption of MCPA and MCPB through the skin is possible.

Eye The concentrate is corrosive and may cause eye damage.

Other Information 6.1D acute toxicant, 6.3A skin irritant, 6.5B sensitiser, 6.8B reproductive or developmental toxicant, 6.9B target organ toxicant, 8.3A eye corrosive, 9.1A aquatic toxicant, 9.2A soil toxicant, 9.3C terrestrial vertebrate toxicant, TOXICITY
Harmful - may be harmful if swallowed, inhaled or absorbed through the skin. May cause skin irritation or sensitisation from prolonged skin contact. May cause liver damage from repeated oral exposure at high doses. May cause reproductive/development damage from repeated oral exposure.
CORROSIVE
Danger - this product is corrosive and may cause eye damage.
ECOTOXIC
Very toxic to aquatic organisms.
Selective herbicide - very toxic to some plant species.
Harmful to terrestrial vertebrates.

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4. FIRST AID MEASURES

Inhalation	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.
Ingestion	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.
Skin	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.
Eye	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.
First Aid Facilities	Flush eyes with plenty of water for 15 minutes holding eyelids open if necessary. Seek medical assistance. Remove contact lenses, if present and easy to do.
Advice to Doctor	Facilities storing or utilizing this material should be equipped with an eyewash facility and safety shower. Treat symptomatically.

5. FIRE FIGHTING MEASURES

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.
Specific Methods	Keep up wind. Do not allow washings to reach sewage or effluent systems.
Hazardous Combustion Products	May emit toxic fumes of hydrogen chloride or phosgene if involved in fires or exposed to extreme heat.
Protective Equipment	Full protective clothing and self-contained breathing apparatus.
Flash Point	Not flammable
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 liquid 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.
Personal Protection	For appropriate personal protective equipment (PPE), refer Section 8.
Environmental Precautions	Prevent from entering drains, waterways or sewers. This product is a herbicide and spills can damage crops, pastures and desirable vegetation.

7. HANDLING AND STORAGE

Corrosiveness	Corrosive to eyes.
Handling	Avoid skin and eye contact and inhalation of spray mist. APPROVED HANDLER: This product must be under the control of an approved handler when applied in a wide dispersive manner; or used by a commercial contractor. 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. BEWARE: Spray drift hazard. Apply this product carefully. Spray drift may cause serious damage to other desirable plants.
Storage	Keep out of reach of children. Store in original container tightly closed and in a locked, dry, cool area away from foodstuffs, fertilisers and seeds. Storage must be in accordance with NZS 8409 Management of Agrichemicals. Stores containing 100L of this product require secondary containment and

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Packaging are subject to signage, and more than 100L require emergency response plans. HARMFUL * CORROSIVE * ECOTOXIC - keep out of reach of children

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

National Exposure Standards No exposure limits (WES, TEL or EEL's) have been specifically assigned for this product.
WES TWA for dimethylamine = 10ppm and 18mg/m³

Personal Protective Equipment When opening the container, preparing spray and using the prepared spray wear safety goggles, waterproof gloves, washable hat, cotton overalls buttoned to the neck and wrist, and boots.

Eng. Controls Handle in well ventilated areas, generally natural ventilation is adequate. When working with the concentrate in confined spaces, it is recommended that forced ventilation be used to remove traces of dimethylamine vapour from the working atmosphere

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Brown - amber liquid

Solubility in Water Soluble

Specific Gravity (H2O=1) 1.072

pH Value 8.5 - 9.5 (1%)

Vapour Pressure MCPA & MCPB dimethylamine salts are not volatile

Flash Point Not flammable

Other Information (SL) Soluble concentrate

10. STABILITY AND REACTIVITY

Stability Stable under normal conditions of handling and storage.

Materials to Avoid Reaction of the concentrate or spray mix with acids will precipitate solid MCPA and MCPB and largely de-activate the product and cause blockages in spray equipment.

Hazardous Reaction May react violently with strong oxidising material such as chlorine. If strong alkalis such as caustic soda are added, dimethylamine vapour will be released.

11. TOXICOLOGICAL INFORMATION

Toxicology Information MCPA:
MCPA is considered to be of moderate toxicity to man. There have been very few reported acute toxic effects on users over many years. Several deaths have been recorded, but all of these have been deliberate suicide, generally using the sodium salt.
MCPB:
MCPB is of moderate toxicity to man.

Health Hazard Acute over exposure: Headache, nausea and vomiting with possible twitches and spasms in extreme cases.

Inhalation Not considered a serious hazard because MCPA and MCPB (dimethylamine salts) are practically non-volatile; however, inhalation of spray mists should be avoided. Inhalation of the spray is harmful.

Ingestion The concentrate is not considered a serious hazard due to moderate toxicity. However, the concentrate is considered harmful if swallowed, when classified according to Worksafe Criteria.

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Eye	The concentrate is corrosive and may cause eye damage.
Acute Toxicity - Oral	Acute oral LD50 (rat) 700mg/kg (MCPA), 680mg/kg (MCPB) Acute oral LD50 (mice) 439mg/kg (MCPA)
Acute Toxicity - Dermal	Acute dermal LD50 (rat) >1,000mg/kg (percutaneous, (MCPA), >2,000mg/kg (percutaneous, MCPB)
Acute Toxicity - Inhalation	LC50 (rat) (4hr) >1.14mg/L air (MCPB) LC50 (rat) (4hr) >6.36mg/L air (MCPA)
Subchronic/Chronic Toxicity	Liver and kidney damage has been noted in laboratory animals but only after excessive doses.
Other Information	The Australian Acceptable Daily Intake (ADI) for MCPA for a human is 0.01 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 1.1 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', September 2013). The Australian Acceptable Daily Intake (ADI) for MCPB for a human is 0.01 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 1.1 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: Aust Govt Dept. of Health, Office of Chemical Safety, 'ADI List', September 2013).

12. ECOLOGICAL INFORMATION

Environ. Protection	Do not spray in areas where damage to sensitive plants may result from direct application or spray drift. Do not spray in high winds.
Persistence / Degradability	MCPB and flumetsulam are not rapidly degradable
Bioaccumulation	MCPA, MCPB and flumetsulam are not bioaccumulative.
Acute Toxicity - Fish	LC50 (96h) rainbow trout = 91mg/L for MCPA LC50 (48h) fathead minnow = 11mg/L for MCPB LC50 (96h) silverside minnow = >379mg/L for flumetsulam
Acute Toxicity - Daphnia	LC50 (48h) daphnia = 55mg/L for MCPB sodium salt LC50 (48h) daphnia = >190mg/L for MCPA
Acute Toxicity - Algae	EC50 (96h) Navicula pelliculosa = 0.21mg/L for MCPA EC50 (120h) Selenastrum capricornutum = 0.42mg/L for MCPB sodium salt EC50 (5d) Scenedesmus costatum = 0.003mg/L for flumetsulam
Acute Toxicity - Other Organisms	EC50 Bobwhite quail = 377mg/kg for MCPA LD50 bee = 104µg/bee for MCPA LC50 bee = >100µg/bee for flumetsulam

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

U.N. Number	It is good practice not to transport agricultural chemical products with food, food related materials and animal feedstuffs. 3082
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. - (MCPB 30%; MCPA 2%)
DG Class	9
Hazchem Code	2X
Packaging Method	-
Packing Group	III
EPG Number	-
IERG Number	47
IMO Marine Pollutant	Yes. Environmentally Hazardous Substance mark required.



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Other Information Do not carry more than 1L of 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

Packaging & Labelling HARMFUL * CORROSIVE * ECOTOXIC - keep out of reach of children
Hazard Rating Systems NFPA/HMIS: 3-1-1
National Legislation Registered pursuant to the ACVM Act 1997, No. P8965
See www.foodsafety.govt.nz for registration conditions
Approved pursuant to the HSNO Act 1996, Approval Code HSR100906
See www.epa.govt.nz for approval controls.
UK Legislation info@nz.nufarm.com

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
SDS History N/A - first issue
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