



103 - 105 PIPE ROAD, LAVERTON NORTH, VIC. AUSTRALIA 3026
Postal Address: PO Box 103, LAVERTON, VIC. AUSTRALIA 3028
Telephone: 03 9282 1000 Fax: 03 9282 1001

PRODUCT: BUTTRESS Selective Herbicide	Infosafe No: NU067 ISSUED: Nov 00
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Hazardous according to criteria of Worksafe Australia

UN NO....:	D.G.CLASS:	CAS NO...:
HAZCHEM...:	SUB. RISK:	
SUSDP....: S5 (FED) S5 (NSW) S5 (VIC) S5 (SA) S5 (WA) S5 (Qld) S5 (Tas) S5 (NT)	SPEC.EPG...:	PACK. GRP:
G.T.EPG...:		

PRODUCT IDENTIFICATION

OTHER NAMES:

TRADENAMES..:	MANUF.:	MANCODE:
Buttress Selective Herbicide	NUFARM	0270

INGREDIENTS:

CHEMICAL ENTITY:	CAS NO:	PROPORTION:
2,4-DB (present as the dimethylamine salt)		500g/L
Briquest ADPA-60A (60%) (hydroxyethane-1,1 diphosphoric acid)	2809-21-4	10-30% w/w
Water		10-30% w/w

PHYSICAL DESCRIPTION/PROPERTIES

APPEARANCE:

Brown liquid with faint ammoniacal odour.

BOILING POINT.....: 100°C

MELTING POINT.....: Approx -5°C

VAPOUR PRESSURE.....: Active ingredient considered non volatile

VOLATILE COMPONENT.: ~26%

SPECIFIC GRAVITY...: 1.179 - 1.181

FLASH POINT.....: Not flammable

FLAMMABILITY LIMITS: Not flammable

pH.....: 9.8 - 10.1

FORM.....: Liquid

OTHER PROPERTIES:

Completely miscible with water.

USE:

For control of broadleaf weeds in seedling and established lucerne, medic and sub-clover pastures and cereal crops undersown with lucerne, medic or sub-clover.



MATERIAL SAFETY DATA SHEET

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HEALTH HAZARD INFORMATION

ACUTE EFFECTS

SWALLOWED:

Not considered a serious hazard due to relatively low toxicity although some damage to mucous membranes could occur due to the alkalinity of the formulation.

The concentrate is considered harmful if swallowed, when classified according to the Worksafe Criteria.

EYE:

The concentrate may cause irritation and possible damage if contact is prolonged due to the alkalinity of the formulation.

SKIN:

The concentrate may cause irritation with a possibility of damage if contact is prolonged or excessive due to the alkalinity of the formulation.

INHALED:

Not considered a serious hazard although inhalation of spray mists should be avoided.

CHRONIC EFFECTS

Chronic Over Exposure: Liver and kidney damage has been noted in laboratory animals but only after excessive doses.

OTHER HEALTH HAZARD INFORMATION

Acute Over Exposure: Headache, nausea and vomiting with possible dyspnea, cyanosis, exhaustion, twitching and spasms in extreme cases.

FIRST AID

SWALLOWED:

If swallowed induce vomiting. Use Ipecac Syrup (APF) if available.

EYE:

If in eyes, hold eyes open and flood with water for at least 15 minutes and see a doctor.

SKIN:

Remove contaminated clothing and launder before re-use.
Wash affected areas thoroughly with soap and water.

INHALED:

Remove to fresh air until recovered.

FIRST AID FACILITIES:

ADVICE TO DOCTOR:

Treat symptomatically.



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TOXICITY DATA:

Technical 2,4-DB

Toxicity to mammals:

Acute oral LD50 rats: 700mg/kg

Acute dermal LD50 rats: 800mg/kg

Toxicity to fish:

Toxic to fish at concentrations used.

LC50 for rainbow trout 4mg/l (96 hours, amine salt and esters)

Toxicity to bees:

Not toxic to bees

Briquest ADPA-60A (60% acid):

LD50 (oral, rat): 2200mg/kg

Chronic tests for 2 years at 1000mg/kg body weight in the diet of rats showed no effects.

Dimethylamine:

LD50 (oral, rat): 700mg/kg

Toxicity to fish:

Moderate to low toxicity to fish.

LC50 for rainbow trout for 2,4-DB is 4mg/L (96 hours).

Not toxic to bees.

PRECAUTIONS FOR USE

EXPOSURE STANDARDS:

No exposure standards have been set for this product.

An exposure standard for dimethylamine vapour of 10ppm (TWA) has been set.

ENGINEERING CONTROLS:

The concentrate has a distinctive odour of dimethylamine (fishy).

Handling of the concentrate in confined spaces should be avoided unless effective forced ventilation is provided.

Dimethylamine is moderately toxic, LD50 (oral, rat) is 700mg/kg and a TLV of 10ppm (TWA) has been set.

In an open area, natural ventilation is adequate.

PERSONAL PROTECTION:

Avoid contact with eyes and skin.

When preparing product for use wear cotton overalls buttoned to the neck and wrist and washable hat, elbow length PVC gloves and effective eye protection. After use and before eating, drinking or smoking wash hands,

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Packaging and Labelling: - (continued)

S2 - Keep out of reach of children

S13 - Keep away from food, drink and animal feeding stuffs

SPILLS AND DISPOSAL:

Contain spill and absorb with sand or proprietary absorbent (vermiculite).
Prevent from entering drains, waterways or sewers.

Collect in sealed open top containers for disposal.

Triple rinse container then offer for recycling/reconditioning or puncture
and dispose of in a sanitary landfill, or by other procedures approved by
State and local authorities.

On-site disposal of concentrate is not acceptable.

FIRE/EXPLOSION HAZARD:

Non combustible.

Boiling Point 100°C. Flash Point > 100°C. Fire Point - Nil

If material is involved in an intense fire, SCBA should be worn.

Possible hazardous combustion products include, carbon monoxide, phosgene,
phospine, oxides of phosphorous. If possible, keep drums cool.

Extinguishing agents should be chosen for their suitability for the
materials that are burning. Fire water should be kept from flowing into
waterways.

Reactivity Data:

Reaction of the concentrate or spray mix with acids will precipitate solid
2,4-DB acid and largely de-activate the product and cause blockages in
spray equipment.

The addition of a strong alkali such as caustic soda will cause release of
dimethylamine vapour. Dimethylamine is classified as harmful according to
Worksafe Australia.

LD50 (oral, rat) is 700mg/kg and a TLV of 10ppm (TWA) has been set.

Under adverse conditions, the product may react strongly with powerful
oxidising agents.

Hazardous polymerisation is not possible.

OTHER INFORMATION

User Data:

WSA Haz? :Y

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NUFARM AUSTRALIA LIMITED A.C.N. 004 377 780

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Contact Point:

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After Hours: Shift Supervisor Phone: 1 800 033 498

End: Infosafe printed Material Safety Data Sheet - 9 April 2001