MATERIAL SAFETY DATA SHEET

STATEMENT OF HAZARDOUS NATURE:

Not classified as hazardous according to the criteria of NOHSC

COMPANY DETAILS:

Syngenta Crop Protection Pty Limited A.B.N. 33 002 933 717 140-150 Bungaree Rd., PENDLE HILL, NSW, 2145 Telephone No.: (02) 9688 0444 24 Hours Emergency No.: 1 800 033 111

IDENTIFICATION

PRODUCT NAME: LOGRAN^o B-Power Herbicide

Formulation type: Active Ingredients:	water dispersible granule triasulfuron, butafenacil	Dangerous Goods Class/ and Subsidiary Risk (ADG):	none allocated
Chemical type:	sulphonyl urea, Pyrimidindione	Hazchem Code:	none allocated
Product Code No.:	A12338A	Packing Group	none allocated
UN Number:	none allocated	Poisons Schedule:	exempt

USE: Herbicide for pre-plant control of annual ryegrass, Paradoxa grass and certain broadleaf weeds in wheat; as specified in the Directions for Use table on the container label.

PHYSICAL DESCRIPTION/PROPERTIES

Appearance: Odour: Vapour pressure: Specific gravity:	Grey to beige granules Non-specific Not available Not available	Flashpoint: Flammability: Behaviour in water:	Non-flashing Non-flammable Not volatile
OTHER PROPERTIES Explosive properties: Ignition temperature: Thermal sensitivity: Self-heating properties: Bulk density: Particle size:	Non-explosive Not available Non-sensitive Not self heating 0.5 g/cm ³ 0.2 - 1.6 mm	Oxidising properties: Corrosiveness: Combustibility: Volatility: pH (1% aqueous):	Non-oxidising Non-corrosive Non-combustible Non-volatile Not available
INGREDIENTS triasulfuron (technical grade) to give triasulfuron butafenacil (technical grade) to give butafenacil other ingredients determined not to be hazardous		CAS No. [82097-50-5] 134605-64-4	Content (%w/w) >52 52 > 20 20 to 100

HEALTH HAZARD INFORMATION

HEALTH EFFECTS

ACUTE

Toxicity - This product is unlikely to present a hazard during normal use (WHO Hazard Class III).

Swallowed: LOW TOXICITY

Tests on rats with both active constituents indicate a low toxicity following single doses of the undiluted product. (LD₅₀ >5000 mg/kg)

Dermal absorption: LOW TOXICITY Tests on rats with both active constituents indicate

Tests on rats with both active constituents indicate a low toxicity due to skin contact with triasulfuron technical. $(LD_{50} > 2000 \text{ mg/kg})$

	Tests on rats with both active constituents indicate a low toxicity due to inhalation $(LC_{50} (4 h) >5100 mg/m^3)$
<u>Irritation</u> Eye: Skin:	SLIGHT - IRRITANT (based on studies using butafenacil technical with rabbits) NON - IRRITANT (based on studies with both active constituents on rabbits)

LOW TOXICITY

Sensitisation

Skin: pigs). NOT A SENSITISER (based on studies with both active constituents on guinea

Poisoning symptoms -

No case of human poisoning due to this product is on record. The poisoning symptoms observed with both active constituents in laboratory mammals were non-specific.

CHRONIC (Active Ingredient)

Triasulfuron technical and **Butafenacil technical** have been extensively tested on laboratory mammals and in test-tube systems. No evidence of neurotoxic, mutagenic, teratogenic or reproductive effects was obtained. The liver was identified as target organ for butafenacil. No evidence of neurotoxic, mutagenic, teratogenic or reproductive effects was obtained. No carcinogenic potential was noticed. Butafenacil inhibits haeme synthesis in animals. Liver necrosis and liver weight increases were observed. In addition, porphyruria was observed in the rat.

FIRST AID

In case of poisoning by any exposure route contact a doctor or Poisons Information Centre. Phone 131 126Swallowed:DO NOT induce vomiting. Give a glass of water. NOTE: Never give anything by mouth to
an unconscious person.Eye:Flush with large quantities of clean tap water for 15 minutes. Get to a doctor.Skin:Remove contaminated clothing and wash affected areas thoroughly with soap and water.Inhaled:Move person to fresh air and keep at rest until recovered.

ADVICE TO DOCTOR

No specific antidote is available. If poisoning is suspected apply symptomatic therapy. If swallowed, repeatedly administer medicinal charcoal in a large quantity of water.

PRECAUTIONS FOR USE

ALWAYS READ AND FOLLOW THE LABEL INSTRUCTIONS AND WARNINGS

EXPOSURE STANDARDS

No official exposure standards have been set for the ingredients of this product.

Exposure Potential - Swallowing is unlikely under normal conditions of usage. Significant skin uptake does not occur. Inhalation of spray mist is a possible route of exposure. This product is diluted with water prior to use as a spray. This diluted form is less toxic by all exposure routes.

<u>Re-entry Period</u> - Do not enter treated areas until spray has dried.

ENGINEERING CONTROLS

No special requirements. Product is used outdoors.

PERSONAL PROTECTION

Wash hands after use.

FLAMMABILITY

This product is NON-FLAMMABLE and non-combustible.

SAFE HANDLING INFORMATION

STORAGE AND TRANSPORT

Store in the tightly sealed, original containers in a dry, secure, well-ventilated place away from fertilisers, seed, feed and food. Store out of direct sunlight. Keep out of reach of children, unauthorised persons and animals.

SPILLS AND DISPOSAL

In case of spillage it is important to take all steps necessary to:

- Avoid contamination of all areas where vegetation grows this is an extremely potent selective herbicide, and contaminated areas may not support vegetation for many years.
- Avoid eye and skin contact.
- Avoid contamination of waterways.

Procedure for spill:

- (1) Keep all bystanders away.
- (2) Wear full length clothing and PVC gloves.
- (3) Sweep up dust thoroughly and shovel into an uncontaminated drum, adding any broken containers.
- (4) If agricultural soil has been contaminated consider the option of removing and disposing of the contaminated soil to allow vegetation to grow and to stop further contamination.
- (5) Dispose of by burying in an approved secure landfill site..
- (6) Clean all contaminated equipment by rinsing in a dilute solution of 1 litre sodium hypochorite (0.2%) solution, to 200 litres of water.

Note: In the unlikely event of a major prepared spray spill, consider the possible long term consequences to the vegetation. If good agricultural land is likely to be affected it may be necessary to contain and absorb the spill with a soil or sand dam. Disposal of sand/soil dam and any contaminated soil should be carried out as above.

Dispose of empty, used containers by:

- (a) Triple rinsing with water. Add the rinsings to the tank mix or dispose of rinsate in a disposal pit away from desirable plants and their roots, and watercourses. On-site disposal of undiluted product is unacceptable.
- (b) Breaking, crushing or puncturing the container to prevent reuse.
- (c) Disposing of in a local authority landfill site that does not burn its refuse. If there is no local authority landfill readily available in your area, bury the containers under at least 50 cm of soil at a licensed/approved disposal site. **DO NOT** burn empty containers or product.

FIRE/EXPLOSION HAZARD

This product is non-flammable and non-explosive. Extinguish warehouse and factory fires using fine water spray or foam. Do not allow fire-water to enter drains.

OTHER INFORMATION

This product is an extremely potent selective herbicide. Care should be taken to avoid all contact with nontarget vegetation. Do not apply on or near shrubs, trees, lawns, or crops other than wheat. Do not drain or flush equipment near desirable trees or other plants, or in areas where soil seepage may occur. Do not allow spray to drift onto adjacent crops, fallow land or non-target desirable plants. All types of winter cereals (wheat, barley, oats, triticale and cereal rye) can be replanted the following season after use without restrictions. All other crops require a replanting interval. Refer to the product label booklet for full details of replanting intervals. Do not apply to irrigation drains or channels. Do not contaminate dams, streams, creeks, rivers or groundwater with the product, its diluted mixtures or application equipment.

Triasulfuron technical and butafenacil technical are practically non-toxic to birds, bees and fish.

Note: This product is a registered agricultural chemical and must therefore be used in accordance with the container label directions. A comprehensive package of toxicoForteal and environmental data for the active ingredients of this product has been submitted to the Federal health and environment authorities and has been evaluated by expert toxicologists and environmental scientists.

CONTACT POINT: Regulatory Affairs Manager - Crop Protection - (02) 9688 0444 24 HOURS EMERGENCY CONTACT: 1 800 033 111

This Material Safety Data Sheet summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.

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