

Material Safety Data Sheet

CS: 1.4.21

Page: 1 of 4

Infosafe No™ 3NU55 Issue Date :November 2009 ISSUED by CRPCARE CS: 1.4.21

Product Name **FLAME® Herbicide**

Not classified as hazardous

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name FLAME® Herbicide
Product Code 0493
Product Type Group B Herbicide
Company Name Crop Care Australasia Pty Ltd (ABN 53 061 362 347)
Address Unit 15/16 Metroplex Avenue Murarrie
Queensland 4172 Australia
Emergency Tel. 1800 033 498 (24hr Australia)
Telephone/Fax Number Tel: +61 7 3909 2000
Fax: +61 7 3909 2010
Recommended Use For the pre-emergence control of certain annual grass and broadleaf weeds in fallow situations, sugarcane and peanuts and early post-emergence control of certain annual grass and broadleaf weeds in peanuts and sugarcane as specified in the Directions for Use section of the label.
Other Information This MSDS 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. HAZARDS IDENTIFICATION

Hazard Classification Not classified as hazardous
NON-HAZARDOUS SUBSTANCE.
NON-DANGEROUS GOODS.
Hazard classification according to the criteria of NOHSC.
Dangerous goods classification according to the Australia Dangerous Goods Code.
Risk Phrase(s) Not classified as hazardous
Other Information Poisons Schedule : Not Scheduled

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Characterization Liquid

Ingredients	Name	CAS	Proportion
	Imazapic present as the ammonium salt	104098-48-8	240 g/L
	Other ingredients determined not to be hazardous		10-30 %
	Water		Balance

4. FIRST AID MEASURES

Inhalation Remove affected person to fresh air until recovered.
If symptoms develop or persist, seek medical advice.
Ingestion Rinse mouth and then drink plenty of water.
Skin Wash affected areas thoroughly with soap and water.
Remove contaminated clothing and launder before re-use.
Eye If in eyes, hold eyelids open and wash with copious amounts of water for at least 15 minutes.
Seek medical advice immediately.
First Aid Facilities If poisoning occurs, contact a doctor or the Poisons Information Centre (Australia) on 13 11 26.
Advice to Doctor Treat symptomatically.

5. FIRE FIGHTING MEASURES

Material Safety Data Sheet

CS: 1.4.21

Page: 2 of 4

Infosafe No™ 3NU55	Issue Date :November 2009	ISSUED by CRPCARE	CS: 1.4.21
--------------------	---------------------------	-------------------	------------

Product Name **FLAME® Herbicide**

Not classified as hazardous

Suitable Extinguishing Media	If involved in a fire, the product will not burn. Choose extinguishing media to suit the burning material.
Hazards from Combustion Products	Non-flammable. If involved in a fire, the dehydrated components may emit oxides of carbon and oxides of nitrogen.
Special Protective Equipment for fire fighters	Breathable air apparatus may have to be worn if material is involved in fires especially in confined spaces.
Specific Hazards	Considered low risk due to water content, however upon evaporation of water the product is combustible.
Emergency Action in case of Fire	If exposed to fire, keep container cool by spraying with water. If possible, remove other containers from the area of fire.
Other Information	STOP FIRE WATER FROM ENTERING DRAINS OR WATER BODIES.

6. ACCIDENTAL RELEASE MEASURES

Spills & Disposal	Contain spill and absorb with clay, sand, soil or proprietary absorbent (such as vermiculite). Collect spilled material and waste in sealable open-top type containers 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	Do NOT contaminate dams, rivers or streams, or any other water bodies with chemical or used containers.
Conditions for Safe Storage	Store in the closed, original container in a cool, well ventilated area. Do not store for prolonged periods in direct sunlight.
Tank Cleaning	See label for detailed information on cleaning of spray equipment.
Other Information	Always read the label and any attached leaflet before use.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

National Exposure Standards	No exposure standards have been set for this product.
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 cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves and goggles. See re-entry period information on the label for this product.
Hygiene Measures	After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash contaminated clothing and safety equipment.
Requirements Concerning Special Training	Check State or Territory regulations that require people who use pesticides in their job or business to have training in the application of the materials.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	Liquid
Appearance	Clear amber to green brown liquid
Solubility in Water	Soluble in water.
Specific Gravity	1.080 - 1.090
pH Value	6.4 - 6.8
Vapour Pressure	<1 x 10 ⁻² mPa (@ 60°C)
Volatile Component	63.9%

Material Safety Data Sheet

CS: 1.4.21

Page: 3 of 4

Infosafe No™ 3NU55 Issue Date :November 2009 ISSUED by CRPCARE CS: 1.4.21

Product Name **FLAME® Herbicide**

Not classified as hazardous

Octanol/Water Partition Coefficient Kow Log P is 0.393
Flammability Not flammable
Other Information 2.0, 3.6, 11.1

10. STABILITY AND REACTIVITY

Chemical Stability Stable under normal conditions.
Hazardous Reactions Keep away from strong oxidising agents.
Hazardous Polymerization Hazardous polymerisation is not possible.

11. TOXICOLOGICAL INFORMATION

Toxicology Information No harmful effects are expected if the precautions on the label and this MSDS are followed.
Inhalation May cause irritation to mucous membranes.
Ingestion The concentrate is of low toxicity if swallowed.
Skin Prolonged contact with the concentrate may cause irritation.
Eye The concentrate may cause irritation of the eyes.
Chronic Effects Based on available data, repeated exposures are not anticipated to cause additional significant adverse effects.
Acute Toxicity - Oral LD50 (rat) >5000 mg/kg for a similar formulation
Acute Toxicity - Dermal LD50 (rat) >5000 mg/kg for a similar formulation
Acute Toxicity - Inhalation LC50 (rat) (4hr) >2.38 mg/l for a similar formulation
Eye Irritation Mild eye irritant.
Skin Irritation Mild skin irritant.
Skin Sensitisation Product is not a skin sensitiser.
Other Information The Australian Acceptable Daily Intake (ADI) for imazapic for a human is 0.3 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 137 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 2008).

12. ECOLOGICAL INFORMATION

Other Precautions Do not contaminate dams, waterways or sewers with this product or the containers which have held this product.
Environ. Protection Spray drift can cause damage, read the label for more information.
Acute Toxicity - Fish The following is data for the active ingredient, imazapic.
LC50 (96hr) for rainbow trout, bluegill sunfish and channel catfish is >100 mg/l
Acute Toxicity - Daphnia LC50 (96hr) for imazapic is >100 mg/l.
Acute Toxicity - Algae EC50 (72hr) for Pseudokirchneriella subcapitata is 0.051 mg/l.
Acute Toxicity - Other Organisms Bees: Not toxic to bees. LD50 >100 µg/bee.

13. DISPOSAL CONSIDERATIONS

Product Disposal On site disposal of the concentrated product is not acceptable. Ideally, the product should be used for its intended purpose. If there is a need to dispose of the product, approach local authorities who hold periodic collections of unwanted chemicals (ChemClear®).
Container Disposal Do not use this container for any other purpose. Triple rinse containers, add rinsate to the spray tank, then offer the

Material Safety Data Sheet

CS: 1.4.21

Page: 4 of 4

Infosafe No™ 3NU55 Issue Date :November 2009 ISSUED by CRPCARE CS: 1.4.21

Product Name **FLAME® Herbicide**

Not classified as hazardous

container for recycling/reconditioning, or puncture top, sides and bottom and dispose of in landfill in accordance with local regulations.

drumMUSTER is the national program for the collection and recycling of empty, cleaned, non returnable crop production and on-farm animal health chemical containers. If the label on your container carries the drumMUSTER symbol, triple rinse the container, ring your local Council, and offer the container for collection in the program.

If recycling, replace cap and return clean containers to recycler or designated collection point.

If not recycling, puncture or shred and bury containers in local authority landfill.

If no landfill is available, bury the containers below 500mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots.

Empty containers and product should not be burnt.

14. TRANSPORT INFORMATION

Storage and Transport Considered non dangerous for transport by the Australian Code for the Transport of Dangerous Goods by Road and Rail.
For bulk shipments as Class 9, use UN 3082, HazChem code 2Z.

UN Number (Sea Transport) 3082

IMO Class/Packing Group Class 9

IMO Marine Pollutant Marine Pollutant

IMO Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(contains Imazapic)

15. REGULATORY INFORMATION

Poisons Schedule Not Scheduled

Packaging & Labelling POISON
KEEP OUT OF REACH OF CHILDREN
READ SAFETY DIRECTIONS BEFORE OPENING OR USING

AICS (Australia) All of the components in this product are listed on the Australian Inventory of Chemical Substances.

16. OTHER INFORMATION

Date of preparation or last revision of MSDS Revised 11/11/2009

Contact Person/Point Normal Hours: Mr Volker Maier Phone: (03) 9282 1000
After Hours: Shift Supervisor Phone: 1800 033 498

Revisions The MSDS was reviewed. Minor changes were made to the information.

Highlighted Other Information ® Registered trademark of BASF
...End Of MSDS...

© Copyright ACOHS Pty Ltd
Copyright in the source code of the HTML, PDF, XML, XFO and any other electronic files rendered by an Infosafe system for Infosafe MSDS displayed on this site is the intellectual property of Acohs Pty Ltd.
Copyright in the layout, presentation and appearance of each Infosafe MSDS displayed on this site is the intellectual property of Acohs Pty Ltd.
The compilation of MSDS's displayed on this site is the intellectual property of Acohs Pty Ltd.
Copying of any MSDS displayed on this site is permitted for personal use only and otherwise is not permitted. In particular the MSDS's displayed on this site cannot be copied for the purpose of sale or licence or for inclusion as part of a collection of MSDS without the express written consent of Acohs Pty Ltd.