

# Material Safety Data Sheet

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Infosafe No™ 3NUEI	Issue Date :March 2008	ISSUED by CRPCARE	CS: 1.4.21
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Product Name **FACTOR WG Herbicide**

Classified as hazardous according to criteria of NOHSC

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

<b>Product Name</b>	FACTOR WG Herbicide
<b>Product Code</b>	0494
<b>Product Type</b>	Group A Herbicide
<b>Company Name</b>	Crop Care Australasia Pty Ltd (ABN 53 061 362 347)
<b>Address</b>	Unit 15/16 Metroplex Avenue Murarrie Queensland 4172 Australia
<b>Emergency Tel.</b>	1800 033 498 (24hr Australia)
<b>Telephone/Fax Number</b>	Tel: +61 7 3909 2000 Fax: +61 7 3909 2010
<b>Recommended Use</b>	For the control of certain grasses in a range of broadacre crops as per the Directions for Use table on the label.
<b>Other Information</b>	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

<b>Hazard Classification</b>	Classified as hazardous according to criteria of NOHSC HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS. Hazard classification according to the criteria of NOHSC. Dangerous goods classification according to the Australia Dangerous Goods Code.
<b>Risk Phrase(s)</b>	Classified as hazardous according to criteria of NOHSC R22 Harmful if swallowed. R38 Irritating to skin. R61(2) May cause harm to the unborn child
<b>Safety Phrase(s)</b>	S13 Keep away from food, drink and animal feeding stuffs. S2 Keep out of reach of children. S36/37 Wear suitable protective clothing and gloves. S46 If swallowed, seek medical advice immediately and show this container or label.
<b>Other Information</b>	Poisons Schedule S5

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

<b>Chemical Characterization</b>	Solid												
<b>Ingredients</b>	<table><thead><tr><th><u>Name</u></th><th><u>CAS</u></th><th><u>Proportion</u></th></tr></thead><tbody><tr><td>Butroxydim</td><td>138164-12-2</td><td>250 g/kg</td></tr><tr><td>Talc</td><td>14807-96-6</td><td>&gt;60%</td></tr><tr><td>Dispersants</td><td></td><td>&lt;10%</td></tr></tbody></table>	<u>Name</u>	<u>CAS</u>	<u>Proportion</u>	Butroxydim	138164-12-2	250 g/kg	Talc	14807-96-6	>60%	Dispersants		<10%
<u>Name</u>	<u>CAS</u>	<u>Proportion</u>											
Butroxydim	138164-12-2	250 g/kg											
Talc	14807-96-6	>60%											
Dispersants		<10%											

## 4. FIRST AID MEASURES

<b>Inhalation</b>	Remove affected person to fresh air until recovered. If symptoms develop or persist, seek medical advice.
<b>Ingestion</b>	If swallowed do NOT induce vomiting; seek medical advice immediately and show this container or label or contact the Poisons Information Centre on 13 11 26 (Aust). Make every effort to prevent vomit from entering the lungs by careful placement of the patient. Rinse mouth and then drink plenty of water. Obtain medical advice.
<b>Skin</b>	Wash affected areas thoroughly with soap and water. Remove contaminated clothing and launder before re-use. If irritation persists, seek medical advice.

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<b>Eye</b>	If in eyes, hold eyelids open and wash with copious amounts of water for at least 15 minutes. Seek medical advice if irritation develops or persists.
<b>First Aid Facilities</b>	If poisoning occurs, contact a doctor or the Poisons Information Centre (Australia) on 13 11 26.
<b>Advice to Doctor</b>	Treat symptomatically.

## 5. FIRE FIGHTING MEASURES

<b>Suitable Extinguishing Media</b>	Water fog, foam, carbon dioxide or dry chemical.
<b>Hazards from Combustion Products</b>	If involved in a fire, it will emit oxides of carbon, oxides of nitrogen and possibly sulfur oxides.
<b>Special Protective Equipment for fire fighters</b>	Breathable air apparatus should be worn when fighting a fire in which this product is involved.
<b>Other Information</b>	STOP FIRE WATER FROM ENTERING DRAINS OR WATER BODIES.

## 6. ACCIDENTAL RELEASE MEASURES

<b>Spills &amp; Disposal</b>	Recover the product by sweeping up or vacuuming without raising dust. Collect spilled material and waste in sealable open-top type containers for disposal. On-site disposal of concentrate is not acceptable.
<b>Personal Protection</b>	For appropriate personal protective equipment (PPE), refer Section 8.
<b>Environmental Precautions</b>	This product is a herbicide and spills can damage crops, pastures and desirable vegetation.

## 7. HANDLING AND STORAGE

<b>Precautions for Safe Handling</b>	Avoid generating dusts while handling the product and mixing. If dusts are generated, it is advisable to wear a dust mask, refer Section 8. Do NOT contaminate dams, rivers or streams, or any other water bodies with chemical or used containers.
<b>Conditions for Safe Storage</b>	Store in the closed, original container in a dry, cool well ventilated area out of direct sunlight.
<b>Other Information</b>	Always read the label and any attached leaflet before use.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<b>National Exposure Standards</b>	The manufacturer has recommended the following exposure standard for butoxydim: TLV (TWA) 0.5 mg/m <sup>3</sup> , STEL - mg/m <sup>3</sup> . NOHSC has set the following exposure standard for talc : TLV (TWA) 2.5 mg/m <sup>3</sup> , STEL -.
<b>Engineering Controls</b>	Handle in well ventilated areas, generally natural ventilation is adequate. Avoid generating and inhaling dusts.
<b>Respiratory Protection</b>	If dusts are present, wear a class P1 dust mask.
<b>Personal Protective Equipment</b>	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.
<b>Hygiene Measures</b>	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.
<b>Requirements Concerning Special Training</b>	NSW regulations require that people who use pesticides in their job or business must have training in the application of the materials.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Form</b>	Solid
<b>Appearance</b>	Off white granules

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<b>Odour</b>	Unpleasant, sickly odour
<b>Melting Point</b>	81°C for butroxydim
<b>Solubility in Water</b>	Disperses in water. Solubility of butroxydim is 6.9 mg/l @ 20°C
<b>Vapour Pressure</b>	0.001 mPa @ 20°C for butroxydim
<b>Octanol/Water Partition Coefficient</b>	Kow Log P is 1.9 (pH7 @ 25°C for butroxydim)
<b>Flammability</b>	Non combustible material.
<b>Other Information</b>	pKa is 4.36

## 10. STABILITY AND REACTIVITY

<b>Chemical Stability</b>	Stable under normal conditions. Hydrolyses slowly at pH <7.
<b>Hazardous Reactions</b>	Keep away from strong oxidising agents.
<b>Hazardous Polymerization</b>	Hazardous polymerisation is not possible.

## 11. TOXICOLOGICAL INFORMATION

<b>Toxicology Information</b>	No harmful effects are expected if the precautions on the label and this MSDS are followed.
<b>Inhalation</b>	May cause irritation to the respiratory tract.
<b>Ingestion</b>	Possible symptoms of exposure to the concentrate include: nausea, vomiting and abdominal pains.
<b>Skin</b>	Will irritate the skin.
<b>Eye</b>	May irritate the eyes.
<b>Chronic Effects</b>	Chronic exposure can cause damage to the liver.
<b>Reproductive Toxicity</b>	At doses toxic to maternal animals, butroxydim has been shown to produce developmental toxicity in a number of species.
<b>Mutagenicity</b>	The weight of evidence indicates that butroxydim does not present a mutagenic risk.
<b>Carcinogenicity</b>	The weight of the evidence is that butroxydim is not carcinogenic.
<b>Acute Toxicity - Oral</b>	The following data is for the active ingredient, butroxydim. LD50 (rat, female) 3476 mg/kg LD50 (rat, male) 1635 mg/kg
<b>Acute Toxicity - Dermal</b>	LD50 (rat) >2000 mg/kg for butroxydim
<b>Acute Toxicity - Inhalation</b>	LC50 (rat) (4hr) >2.99 mg/l for butroxydim
<b>Eye Irritation</b>	Mild eye irritant.
<b>Skin Irritation</b>	May cause irritation.
<b>Skin Sensitisation</b>	Product is not a skin sensitiser.
<b>Other Information</b>	The Australian Acceptable Daily Intake (ADI) for butroxydim for a human is 0.005 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 0.5 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 2007).

## 12. ECOLOGICAL INFORMATION

<b>Persistence / Degradability</b>	Average field half life of butroxydim is 9 days.
<b>Other Precautions</b>	Do not contaminate dams, waterways or sewers with this product or the containers which have held this product.

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**Environ. Protection** Spray drift can cause damage, read the label for more information.

**Acute Toxicity - Fish** The following is data for the active ingredient, butroxydim.  
LC50 (96 hr) for rainbow trout is >6.9 mg/l.  
LC50 (96 hr) for bluegill sunfish is 8.8 mg/l.

**Acute Toxicity - Daphnia** LC50 (48 hr) for daphnia is >3.7 mg/l for butroxydim.

**Acute Toxicity - Algae** EC50 for Selenastrum capricornutum is 0.71 mg/l.

**Acute Toxicity - Other Organisms** The following data is for the active ingredient, butroxydim.  
Birds: Not toxic to birds. LD50 for mallard duck is >2000 mg/kg  
LD50 for bobwhite quail is 1221 mg/kg  
Bees: Not toxic to bees. LD50 >200 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** Thoroughly wash out the inner and add washings to the spray tank. Dispose of washed inner and cardboard box in landfill.  
PLASTIC: Triple or preferably pressure rinse containers before disposal. Add rinsings to the spray tank.  
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.

## 15. REGULATORY INFORMATION

**Poisons Schedule** S5

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

**Hazard Category** Toxic, Irritant

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

## 16. OTHER INFORMATION

**Contact** Normal Hours: Mr Volker Maier Phone: (03) 9282 1000

**Person/Point** After Hours: Shift Supervisor Phone: 1800 033 498

**Revisions** First Issue

**Highlighted**

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