

# Safety Data Sheet

## Grainex® 500EC

Date of issue: 18<sup>th</sup> December, 2013

<b>1) Identification of Substance:</b>		
Product name:	Grainex 500EC	
Active Ingredient(s):	500g/litre pirimiphos-methyl	
ACVM Approval:	P8811	
EPA Approval Code:	HSR000196	
Distributed by:	Adria Crop Protection P.O. Box 535 Kumeu 1250, Auckland Ph: 09-412-9817 Fax: 09-412-9807 <a href="http://www.adriacp.co.nz">www.adriacp.co.nz</a>	
Emergency Number:	National Poisons Centre 0800 POISON 0800 764 766	
<b>2) Hazards Identification:</b>		
HSNO Classifications:	3.1C, 6.1D, 6.3B, 6.4A, 6.8B, 6.9A, 9.1A, 9.3A, 9.4A.	
Risk and safety phrases:	<b>3.1C:</b> Flammable liquid. Keep away from sources of heat or flame. <b>6.1D:</b> Warning. May be harmful if swallowed, inhaled or absorbed through the skin. <b>6.3B:</b> May cause skin irritation. Avoid skin contact. <b>6.4A:</b> May cause eye irritation. Avoid eye contact. <b>6.8B:</b> May cause reproductive/developmental damage from repeated oral and inhalation exposure at high doses. <b>6.9A:</b> Danger. May cause internal organ damage from repeated oral and inhalation exposure at high doses. <b>9.1A:</b> Very toxic to aquatic organisms. <b>9.3A:</b> Toxic to terrestrial vertebrates. <b>9.4A:</b> Very toxic to terrestrial invertebrates.	
<b>3) Composition Details:</b>		
Chemical identity:	Pirimiphos-methyl	
Chemical identity of ingredients:		
Ingredient:	CAS No.:	Content (w/v)
Pirimiphos-methyl	29232-93-7	500g/l
<b>4) First Aid Measures:</b>		
General Information:		
Skin contact:	Immediately flush body and clothes with large amounts of water. Remove contaminated clothing and footwear. Wash affected areas with soap and water. Seek medical attention immediately.	

Eye contact:	Flush eyes immediately and continue for at least 15 minutes. Seek medical attention immediately.
Ingestion:	Do NOT induce vomiting if swallowed. Seek medical attention immediately. For advice, contact the National Poisons Centre on 0800 POISON (0800 764766).
Inhalation:	Remove patient to fresh air. Lie down and keep warm and rested. If breathing is shallow or has stopped ensure airway is clear and apply resuscitation. Seek medical assistance immediately.
Treatment:	<p>Grainex 500EC is an organophosphorous insecticide, which inhibits cholinesterase activity and interferes in nerve impulse transmission. Onset of symptoms may be delayed for several hours. Atropine is the specific antidote and may be given immediately by qualified staff at a level of 2-5 mg (intravenously or intramuscularly), every 20 minutes until atropinisation occurs. Considerable amounts of atropine may be necessary. Atropine must NOT be given to cyanosed patients; administer oxygen first. Do NOT use opiates or barbituates. If convulsions occur, administer diazepam (10mg intravenously). Take venous blood sample for determination of blood cholinesterase activity. Cholinesterase reactivators (Pralidoxime) should, if possible, be given at the same time as atropine. They are not effective 24 hours after exposure and are not substitutes for atropine.</p> <p>Pralidoxime should be administered at: Mild poisoning: 1g in 2-3ml water (intramuscularly); Severe poisoning: 2g in 30ml water (intravenously). Following ingestion, adsorbents such as charcoal may be of value. If gastric lavage or emesis is considered necessary, inhalation of hydrocarbons must be prevented. Hydrocarbon aspiration may complicate poisonings involving ingestion.</p>
<b>5) Fire-Fighting Measures:</b>	
Specific hazards:	Flammable liquid and vapour. Explosive concentrations of vapours may be formed in enclosed or poorly ventilated areas.
Extinguishing media and methods:	Water spray, foam, dry chemical, Carbon dioxide (CO <sub>2</sub> ). Avoid water jet.
Recommended protective clothing:	Wear SCBA and chemical-protective clothing.
Hazchem Code:	3[Y]
<b>6) Accidental Release Measures:</b>	
Personal precautions:	Use appropriate clothing and eye/face protection. Avoid contact with skin, eyes and clothing. Remove contaminated clothes and shoes immediately.
Environmental precautions:	VERY TOXIC TO AQUATIC ORGANISMS. DO NOT contaminate an aquatic environment with chemical or empty container. DO NOT spray over, or allow drift to drift over, an aquatic environment. Grainex 500EC must not be applied onto or into water. DO NOT allow drift outside the target area to

	occur. Spray must not be applied in an area where bees are foraging. Do not discharge into drains/surface waters/groundwater. Do not discharge into the subsoil/soil.
Spill procedures:	Wear appropriate protective clothing and prevent material from entering waterways. Absorb spills with inert material and place in waste containers. Wash area with water and absorb with further inert material.
Disposal procedures:	Dispose of waste safely, according to local Council regulations.
<b>7) Handling &amp; Storage:</b>	
Handling:	Apply using calibrated and maintained equipment in accordance with the NZ Standard for the Management of Agrichemicals (NZS8409). Grainex 500EC must be applied via ground-based methods only. <b>METHOD RESTRICTIONS:</b> This product cannot be applied indoors with high pressure handgun spray equipment. <b>PERSONAL PROTECTIVE (PPE) AND RESPIRATORY PROTECTIVE EQUIPMENT (RPE):</b> Avoid contact with eyes and skin. Avoid inhalation of vapour or spray mist. When mixing or applying, wear chemical resistant overalls, chemical resistant boots and gloves, chemical resistant footwear plus socks, chemical resistant head gear, eye protection and respirator (organic vapour and particulate matter). Clean protective clothing daily after work. Do not eat, drink or smoke while using. Remove protective clothing and wash hands and face thoroughly before meals and after work. Avoid handling, mixing or use of the product or container near heat, flame or other source of ignition. Do not use near air vents or ducts. Apply with well maintained and calibrated spray equipment.
Storage:	Store in original container tightly closed and in a locked, cool, dry, ventilated area away from foodstuffs, fertilisers and seeds. Protect from extreme temperatures. Keep out of reach of children.
<b>8) Exposure Control / Personal Protection:</b>	
Engineering measures:	
Respiratory protection:	Respirator (organic vapour and particulate matter) when handling or applying.
Eye protection:	Wear safety goggles with side-shields or full respirator with visor.
Hand protection:	Elbow-length barrier multilayer PVC/nitrile gloves.
Other protective equipment:	Body protection (chemical protection suit, boots) must be chosen depending on activity and possible exposure.

General Safety & Hygiene measures:	Avoid contact with skin and eyes and inhalation of dust from concentrate or spray mist. When mixing or applying, wear protective clothing, including face shield, impervious gloves and footwear. If clothing becomes contaminated with product, remove clothing immediately. DO NOT eat, drink or smoke while using. Wash hands and exposed skin thoroughly with soap and water before meals and after work. Wash protective clothing daily after work.
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### 9) Physical & Chemical Properties:

Form:	Liquid
Colour:	Clear to brown
Odour:	Characteristic
Melting point/boiling point:	NA
Density:	1.026 g/L
Surface tension:	NA
pH:	4.8
Flash point:	38°C
Ignition Temperature:	NA
Explosive Limits:	NA

### 10) Stability & Reactivity:

Conditions to avoid:	Heat and light.
Materials to avoid:	Avoid mixing with strong acids, alkalis and oxidising agents such as chlorine compounds, ammonium nitrate, etc.
Hazardous reactions:	Products arising from combustion or thermal decomposition may be toxic, corrosive or flammable.

### 11) Toxicological Information:

Acute oral toxicity:	LD <sub>50</sub> : 1 522 mg/kg (male rat), 1 732 mg/kg (female rat)
Acute inhalation toxicity:	Technical material: LC <sub>50</sub> (4 h) for rats >5.04 mg/l.
Acute dermal toxicity:	LD <sub>50</sub> > 2 000 mg/kg (Rat)
Skin irritation:	May cause skin irritation.
Eye irritation:	May cause eye irritation.
Sensitisation:	None.

### 12) Ecological Information:

Acute fish toxicity:	LC <sub>50</sub> 2.3 mg/L, 96 h: <i>Oncorhynchus mykiss</i> (Rainbow trout)
Toxicity for daphnia:	EC <sub>50</sub> : 0.0005 mg/L, 48 h
Toxicity to algae:	ERC <sub>50</sub> : 2.4 mg/L, 72 h

### 13) Disposal Considerations:

Disposal:



Triple rinse packaging and add residue to spray tank. Take empty container to an AgRecovery depot for disposal.

Empty container precautions:

Avoid contamination of any water supply with chemical or empty container.

### 14) Transportation Information:

Rail/road (RID/ADR):

FLAMMABLE LIQUID, N.O.S. (AROMATIC HYDROCARBON SOLVENT 36%, BUTANOL 2%), ORGANOPHOSPHORUS INSECTICIDE (PIRIMIPHOS-METHYL 50%).  
MARINE POLLUTANT  
Class: 3  
Packaging group: III  
UN number: 1993



Sea (IMDG code):

FLAMMABLE LIQUID, N.O.S. (AROMATIC HYDROCARBON SOLVENT 36%, BUTANOL 2%), ORGANOPHOSPHORUS INSECTICIDE (PIRIMIPHOS-METHYL 50%).  
MARINE POLLUTANT  
Class: 3  
Packaging group: III  
UN number: 1993



Air (ICAO/IATA):

FLAMMABLE LIQUID, N.O.S. (AROMATIC HYDROCARBON SOLVENT 36%, BUTANOL 2%), ORGANOPHOSPHORUS INSECTICIDE (PIRIMIPHOS-METHYL 50%).  
MARINE POLLUTANT  
Class: 3  
Packaging group: III  
UN number: 1993



<b>15) Regulatory Information:</b>	
Approved handlers:	This product must be under the care of an approved handler during wide dispersive use or when used by a commercial contractor.
Tracking:	General tracking requirements apply.
ACVM controls:	See <a href="http://www.foodsafety.govt.nz">www.foodsafety.govt.nz</a> for registration conditions.

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