

ASSESSMENT GUIDELINES

Unit 21561

Use, maintain and store agrichemical application safety material.

Level 2, Credit 2, Version 1

Use, maintain, and store agrichemical application safety equipment

Unit standard 21561

Level 2, Credit 2, Version 1

Level of performance required for this unit standard

This is a level 2 unit standard. At this level trainees are expected to demonstrate the following abilities when completing assessment tasks:

- To work under general supervision, as directed; with some responsibility for the standard of the outcome achieved.
- To complete tasks that are established and familiar, with a moderate range of skill and knowledge.
- To apply basic operational knowledge, use readily available information and known solutions to solve familiar problems.

Workplace assessment:

For guidelines on Workplace Assessment, please refer to the NZHITO Workplace Assessors Manual, and for further information, please contact: NZHITO, P O Box 8638, Christchurch. Ph 03 9644 735, Fax 03 9644 737, Website: www.hortito.org.nz

Special notes:

1. Legislation and relevant regulations relevant to this unit standard include but are not limited to – Hazardous Substances and New Organisms Act 1996, and relevant regulations; Health and Safety in Employment Act 1992.
2. The New Zealand Standard applicable to this unit standard is NZS 8409:2004 *The management of agrichemicals*, available from <http://www.standards.co.nz>.
3. Codes and related documentation applicable to this unit standard include but are not limited to: *Responsible Care Management System*, available from the New Zealand Chemical Industry Council (NZCIC, PO Box 5069, Wellington).
4. Definition - *agrichemical* – any substance, whether inorganic or organic, man-made or naturally occurring, modified or in its original state, that is used in any agriculture,

horticulture or related activity, to eradicate, modify or control flora and fauna. It includes agricultural compounds, fertilisers, vertebrate pest control products and oral nutrition products (this definition differs to that given in NZS 8409:2004, where *agrichemicals* exclude fertilisers, vertebrate pest control products and oral nutrition products).

Acknowledgement

At the back of this assessment guide are some *Agriculture ITO* endorsed testing scenario, with answers attached, which has been developed for this unit standard. Also included are some *Agriculture ITO* endorsed information sheets; Nufarm NZ Dangerous Goods Product List, HazNotes and Material Safety Data Sheets for both; Roundup Renew and Chlorpyrifos 48EC.

The attached *Agriculture ITO* scenario maybe used by the Workplace Assessor to carry out assessment and marking of this unit standard on-job if you want.

If you do decide to use it as your method of assessment we only require you to submit the completion form to the NZHITO once the student is deemed to be competent, as is our normal practice.

**Unit 21561: Use, maintain, and store agrichemical application safety equipment
(Apprentice copy)**

ELEMENT	Competent	Range of evidence an assessor should consider
Element 1 Demonstrate the use of agrichemical application safety equipment.	Yes/No	<ul style="list-style-type: none"> ▪ Check agrichemical application safety equipment to ensure function in accordance with manufacturers' specifications. ▪ Wear agrichemical application safety equipment to provide protection from agrichemical contamination during mixing and application, and in accordance with health and safety requirements, and safety data sheet specifications. Range: respirator and four of – other personal protective equipment, gloves, boots, overalls, overtrousers, face mask.
Element 2 Maintain and store agrichemical application safety equipment.	Yes/No	<ul style="list-style-type: none"> ▪ Check and clean safety equipment after use, and store according to manufacturers' specifications. ▪ Maintain respiratory protection equipment according to manufacturers' specifications. ▪ Dispose of washings from decontamination processes of personal protective equipment in accordance with NZS 8409:2004.

_____ (Name of Apprentice)

is **Competent / Not yet competent** in Unit Standard 21561, version 1

Signed (Assessor): _____

WPA Registration Number: _____ Date: _____

**Unit 21561: Use, maintain, and store agrichemical application safety equipment
(Assessor copy)**

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Signed (Assessor): _____

WPA Registration Number: _____ Date: _____

Please send this page to your NZHITO Regional Manager, who will forward it to National Office to register the credits on your NZQA Record of Learning.

Unit 21561: Use, maintain, and store agrichemical application safety equipment.

(Name of Apprentice)

is Competent in Unit Standard 21561. (version 1)

Signed (Assessor):

WPA Registration Number: _____

Date: _____

EMERGENCY INFORMATION AND STORAGE GUIDE / DANGEROUS GOODS DECLARATION

ROUNDUP® RENEW Herbicide

Substance: Amber liquid (soluble concentrate containing 360g/litre glyphosate as the isopropylamine and ammonium salts (CAS No. 70901-12-1)

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (glyphosate, 36%)

UN No.:	DG Class:	Subsidiary Risk Class:	Packing Group:	Flash Point (°C):	HAZCHEM:	Marine Pollutant:	Maximum Transport Quantity:
3082	9	NA	III	NA	2X	Yes	250L

Hazard Classifications:	Tracking Required	Approved Handler:	IER Guide:
[ERMA Approval Code: HSR000767] 9.1B	No	Over water	No. 47

EMERGENCY PROCEDURES 24 HOUR ADVICE IN AN EMERGENCY ONLY: 0800 651 911

IF THIS HAPPENS	DO THIS
Tanker/Vehicle Accident	Switch off engine and electrical equipment. Keep people away, warn other traffic. Check for spills, leaks. Call the emergency services: Dial 111
Spill or leak	Wear overalls, chemical resistant gloves, boots and safety goggles. Prevent further spillage. Absorb spilled product and place in sealable container for disposal. Wash down affected area with water plus detergent. Absorb and collect washings and place in the same sealable container for disposal. Seek advice from the local authority regarding disposal.
Fire	Call the Fire Service: Dial 111. Wear PVC protective clothing and breathing apparatus. Extinguish fires with foam, dry chemical or carbon dioxide. During a fire toxic fumes may be released. Cool sealed drums with water to prevent rupture due to thermal expansion. Contain run-off. Keep non-involved persons away.

FIRST AID

If Swallowed:	Do NOT induce vomiting. For advice contact the National Poisons Centre 0800 POISON (0800 764 766) or a doctor immediately.
If in Eyes:	Hold eyelids apart and flush the eye continuously with running water for at least 15 minutes. Get medical attention.
If on Skin:	If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Do not scrub the skin.
If Inhaled:	Remove patient to fresh air. If not breathing, give artificial respiration, preferably mouth-to-nose. Get medical attention if symptoms develop.

STORAGE AND SEGREGATION SUMMARY

Storage: Store in original container in a cool, dry, ventilated place away from direct heat or direct sunlight. Store away from foodstuffs, seeds, fertilisers, children and animals. Keep container sealed when not in use.

Aggregate Storage Volume Thresholds: When stored with substances of the same hazard the aggregate quantity must be considered. For full details refer to the current NZS8409 Management of Agrichemicals and the HSNO Regulations.

Location Certificate:	Hazardous Atmosphere Zone:	Number of Fire Extinguishers:	Hazard Class & Emergency Action Signage:	Emergency Information:	Emergency Plan:	Secondary Containment:
NA	NA	NA	1,000L	5L	>1,000L	1,000L

DO NOT Store or Load With: Class 1 Explosives	Segregate From: Food or food containers
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Segregation: Check the latest Land Transport Rule Dangerous Goods, Rule 45001 for additional information. Sea transport may require additional segregation. Refer NZS5433 sea segregation for details.

No & Kind of Packages:	Gross Wgt:	Kg	Volume:	m³
Consignor:	Consignee:			
Dangerous Goods Declaration: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labelled, and are in all respects in proper condition for transport according to the applicable international and national rules, regulations and legislation.	Name:	Title:	Signature:	Date:



Material Safety Data Sheet

Page 1 of 5

Infosafe No. 3NUA8 Issue Date : June 2006

ISSUED by NUFARMNZ

Product Name : **ROUNDUP® RENEW**

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name ROUNDUP® RENEW
Product Code 00581
Product Use For weed control in agriculture, horticulture, drains, aquatic areas, forestry and other uses including general weed control. Recommended prior to sowing pasture, crops and for the control of a wide range of brushweeds.
Company Name Nufarm NZ
Address 2 Sterling Avenue Manurewa
Auckland 1702 New Zealand
Emergency Tel. 0800 651 911
Telephone Number/Fax Tel: 0-9-270 4157 Fax: 0-9-270 4159
Product Type Herbicide
Other Information This SDS 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. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Characterization Liquid

Ingredients	Name	CAS	Proportion
	Glyphosate (present as the isopropylamine salt)	1071-83-6	360g/L
	Surfactant		~10%w/v
	Water		Balance

3. HAZARDS IDENTIFICATION

Other Information 9.1B aquatic toxicant, ECOTOXIC
Toxic to aquatic organisms with long-lasting effects.
Non-selective herbicide - very toxic to some plant species.

4. FIRST AID MEASURES

Inhalation Remove patient to fresh air. Lay down and keep warm and rested. If breathing is shallow or has stopped ensure airway is clear and apply resuscitation. Seek medical assistance immediately.

Ingestion Never give anything by mouth to an unconscious person. If swallowed do NOT induce vomiting. For advice, contact the National Poisons Centre (0800 764 766). Seek medical assistance immediately.

Skin Immediately flush body and clothes with large amounts of water. Remove contaminated clothing and footwear. Wash affected areas with soap and water. If a large area is affected seek medical assistance.

Eye Flush eyes with plenty of water for 15 minutes holding eyelids open if necessary. Seek medical assistance.

First Aid Facilities Facilities storing or utilizing this material should be equipped with an eyewash facility and safety shower.

Advice to Doctor Treat symptomatically.

5. FIRE FIGHTING MEASURES

Extinguishing Media If involved in a fire, the product will not burn. Choose extinguishing media to suit the burning material.
Water fog, foam, carbon dioxide or dry chemical.

Specific Methods Keep up wind. Do not allow washings to reach sewage or effluent systems.



Material Safety Data Sheet

Page 2 of 5

Infosafe No. 3NUA8 Issue Date : June 2006 ISSUED by NUFARMNZ

Product Name : **ROUNDUP® RENEW**

Hazardous Combustion Products This product, or spray solutions of this product, react with galvanised steel or unlined steel (except stainless steel) containers and tanks, to produce hydrogen gas which may form a highly flammable or explosive gas mixture. If involved in a major fire, could evolve oxides of nitrogen or phosphorus.

Protective Equipment Full protective clothing and self-contained breathing apparatus.

Other Information Hazchem Code: 2X
Location Certificate: Not applicable
Hazardous Atmosphere Zone: Not applicable
Number of Fire Extinguishers: Not applicable

6. ACCIDENTAL RELEASE MEASURES

Spills & Disposal Wear protective clothing. Clear area of unprotected personnel. Contain spill and absorb with sand, soil or absorbent granules. If spill does enter waterways contact the local authority. Collect in an appropriate sealable container for disposal in an approved landfill.

Personal Protection Wear protective clothing specified for normal operations (see Section 8)

Environmental Precautions Prevent contamination of soil and water. This product is a herbicide and spills can damage crops, pastures and desirable vegetation.

7. HANDLING AND STORAGE

Handling Avoid skin and eye contact and inhalation of spray mist.
APPROVED HANDLER: This product must be under the control of an approved handler when applied directly onto or into water.
TRACKING: Is not required
RECORD KEEPING: Records of use as described in NZS 8409 Management of Agrichemicals, must be kept if using Roundup Renew directly onto or into water.
BEWARE: Spray drift hazard. Apply this product carefully. Spray drift may cause serious damage to other desirable plants.

Storage Keep out of reach of children.
Store in original container tightly closed and in a locked, dry, cool area away from foodstuffs, fertilisers and seeds. Storage must be in accordance with NZS 8409 Management of Agrichemicals.
Stores containing 1,000L of Roundup Renew require secondary containment and are subject to signage, and more than 1,000L require emergency response plans.

Other Information Aggregate Storage Volume Thresholds:
When stored with substances of the same hazard classification the aggregate quantity must be considered. For full details refer to the current NZS8409 Management of Agrichemicals and the HSNO Regulations.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

National Exposure Standards The EEL for glyphosate is set at 0.37mg/L .

Personal Protective Equipment When opening the container, preparing spray and using the prepared spray wear safety goggles, waterproof gloves, cotton overalls buttoned to the neck and wrist, and boots.

Eng. Controls Handle in well ventilated areas, generally natural ventilation is adequate.

Hygiene Measures Do not eat, drink or smoke while using.
Remove protective clothing and wash hands and face thoroughly before meals and after work. Wash protective clothing daily after work.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Clear amber liquid

Odour Faint amine odour

Boiling Point >100°C (water only)

Solubility in Water Soluble in water.

Specific Gravity (H2O=1) 1.16



Material Safety Data Sheet

Page 3 of 5

Infosafe No. 3NUA8 Issue Date : June 2006 ISSUED by NUFARMNZ

Product Name : **ROUNDUP® RENEW**

pH Value	4.5 - 4.9
Vapour Pressure	Active ingredient considered non volatile
Volatile Component	N/A
Flash Point	None
Flammability	Not flammable
Other Information	(SL) Soluble concentrate

10. STABILITY AND REACTIVITY

Stability	When stored appropriately this product should show no significant degradation for 2 years from the date of manufacture.
Hazardous Polymerization	Hazardous polymerisation is not possible.
Materials to Avoid	Corrosive to mild steel, galvanised steel and zinc. Non corrosive to stainless steel, polyethylene and plastics. Do not mix, store or apply the product or spray solutions of the product in galvanised steel or unlined steel (except stainless steel) containers or spray tanks.
Hazardous Reaction	Avoid contact of the concentrate with strong alkalis and alkaline materials such as lime. Such contact may release isopropylamine vapour with a fish like odour, which can be an irritant to eyes. Isopropylamine is moderately toxic, LD50 (oral, rat) is 820 mg/kg and a TLV of 5 ppm (TWA) has been set. TLV (TWA) for ammonia is 25ppm.

11. TOXICOLOGICAL INFORMATION

Toxicology Information	No harmful effects are expected if the precautions on the label and this MSDS are followed.
Inhalation	No adverse respiratory effects are anticipated for this product as the vapour pressure of the active ingredient is very low and the solvent is water. When applying the product as a spray, avoid breathing in spray mist. Some temporary irritation may be experienced.
Ingestion	The concentrate is of low toxicity if swallowed. Amounts swallowed incidental to normal handling procedures and use are not expected to cause injury. However, swallowing of large amounts may cause injury. Possible symptoms of exposure include: nausea, vomiting and gastrointestinal discomfort and diarrhoea. Ingestion of a large quantity of the undiluted product may result in hypotension and pulmonary oedema.
Skin	The concentrated product may cause slight irritation on contact. Prolonged contact is likely to result in irritation.
Eye	The concentrate may cause irritation but permanent damage is not anticipated. Prolonged contact with the concentrate may cause damage.
Chronic Effects	No information available, no chronic effects expected.
Reproductive Toxicity	Based on the results of animal studies glyphosate is not considered to be a reproductive toxin.
Mutagenicity	No information available, no mutagenic or teratogenic effects expected.
Carcinogenicity	Based on the results of animal studies glyphosate is not considered to be carcinogenic.
Acute Toxicity - Oral	LD50 (rat) >5000 mg/kg for a similar formulation
Acute Toxicity - Dermal	LD50 (rabbit) >5000 mg/kg for a similar formulation
Acute Toxicity - Inhalation	LC50 (rat) (4hr) >1.3 mg/l for glyphosate as the isopropylamine salt LC50 concentration not reached.
Eye Irritation	Mild eye irritant.



Material Safety Data Sheet

Page 4 of 5

Infosafe No. 3NUA8 Issue Date : June 2006 ISSUED by NUFARMNZ

Product Name : **ROUNDUP® RENEW**

Skin Irritation Slight irritant.
Skin Sensitisation Product is not a skin sensitiser.
Other Information The Australian Acceptable Daily Intake (ADI) for glyphosate for a human is 0.3 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 30 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, 'ADI List', TGA, August 2003).
Acute over exposure: No significant effects have been documented at levels up to 200mg/kg.

12. ECOLOGICAL INFORMATION

Known Harmful Effects on the Environment Glyphosate products do not appear to pose any threat to birds. Harmful to fish and other aquatic organisms (mainly due to the surfactant).
Other Precautions Do not spray in high winds.
Do not contaminate dams, waterways or sewers with this product or the containers which have held this product.
Environ. Protection Glyphosate is a non-selective contact herbicide.
Spray drift can cause damage, read the label for more information.
This product is permitted for the control of certain weed species in waterways. Carefully read the precautions under 'Aquatic Weed Control' in the 'Directions For Use' table on the label.
Mobility Glyphosate is strongly adsorbed by soil and therefore becomes practically immobile. Microbial degradation is major cause of loss from soil with liberation of carbon dioxide.
Persistence / Degradability Adsorption studies indicate that glyphosate has very low mobility. Average field half life of glyphosate is 47 days.
Bioaccumulation Glyphosate is not bio accumulative, BCF = <1 for bluegill sunfish
Acute Toxicity - Fish For Glyphosate as the isopropylamine salt: Acute LC50 (96hr) bluegill sunfish 5.8 - 14 mg/L, Rainbow trout, 8.2 - 26 mg/L Carp 19.7mg/L
Acute Toxicity - Daphnia EC50 (48hr) is 480 mg/l.
Acute Toxicity - Other Organisms The following data is for the active ingredient, glyphosate.
Birds: Not toxic to birds. LD50 for bobwhite quail is >3850 mg/kg
Bees: Not toxic to bees. LD50 >100 µg/bee.

13. DISPOSAL CONSIDERATIONS

Product Disposal Dispose of product only by using according to the label, or at an approved landfill.
Container Disposal Triple rinse empty container and add rinsate to spray tank. Burn in an appropriate incinerator if circumstances such as wind direction permit. Otherwise crush and bury in a suitable landfill.

14. TRANSPORT INFORMATION

It is good practice to separate this product from food, food related materials, animal feedstuffs, seed or fertilisers during transport.

U.N. Number 3082
Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. - (glyphosate, 36%)
DG Class 9
Hazchem Code 2X
Packaging Method -
Packing Group III
EPG Number -
IERG Number 47
IMO Marine Pollutant Yes. Marine Pollutant mark required.
IMDG EMS F-A, S-F



Material Safety Data Sheet

Page 5 of 5

Infosafe No. 3NUA8 Issue Date : June 2006 ISSUED by NUFARMNZ

Product Name : **ROUNDUP® RENEW**

Other Information Segregation: Check the latest Land Transport Rule Dangerous Goods Rule 45001 for additional information. Sea transport may require additional segregation. Refer NZS5433 sea segregation for details.

15. REGULATORY INFORMATION

Packaging & Labelling ECOTOXIC

Hazard Rating NFPA/HMIS: 2-0-0

Systems

National Legislation Registered pursuant to the ACVM Act 1997, No. P5630
See www.nzfsa.govt.nz/acvm/ for registration conditions
Approved pursuant to the HSNO Act 1996, Approval Code HSR000767
See www.ermanz.govt.nz for approval controls

16. OTHER INFORMATION

Contact Person/Point IN AN EMERGENCY, DIAL 111 - FIRE OR POLICE
24Hr Tollfree Emergency No: 0800 651 911
24Hr Emergency No: National Poisons Centre Phone: 0800 764 766

Revisions Highlighted The SDS was reviewed to include HSNO requirements.

Other Information Supersedes SDS issued 06/08/02
...End Of MSDS...



EMERGENCY INFORMATION AND STORAGE GUIDE / DANGEROUS GOODS DECLARATION

CHLORPYRIFOS 48EC Insecticide

Substance: Amber liquid (emulsifiable concentrate), containing 480g/litre chlorpyrifos (CAS No.2921-88-2)
Proper shipping name: ORGANOPHOSPHORUS PESTICIDE, LIQUID, TOXIC (chlorpyrifos, 48%)

UN No.: 3018	DG Class: 6.1	Subsidiary Risk Class: NA	Packing Group: III	Flash Point (°C): 70	HAZCHEM: 2XE	Marine Pollutant: Yes	Maximum Transport Quantity: 250L
Hazard Classifications: [ERMA Approval Code: HSR000224] 3.1D, 6.1C, 6.3B, 6.4A, 6.9A, 9.1A, 9.2B, 9.3A, 9.4A					Tracking Required: Yes	Approved Handler: All stages	IER Guide: No. 35

EMERGENCY PROCEDURES 24 HOUR ADVICE IN AN EMERGENCY ONLY: 0800 651 911

IF THIS HAPPENS	DO THIS
Tanker/Vehicle Accident	Switch off engine and electrical equipment. Keep people away, warn other traffic. Check for spills, leaks. Call the emergency services: Dial 111
Spill or leak	Eliminate all ignition sources and naked lights. Use non-sparking utensils. Wear PVC overalls, chemical resistant gloves, respirator and safety goggles. Prevent further spillage. Absorb spilled product and place in sealable container for disposal. Wash down affected area with water plus detergent. Absorb and collect washings and place in the same sealable container for disposal. Seek advice from the local authority regarding disposal.
Fire	Call the Fire Service: Dial 111. Wear PVC protective clothing and breathing apparatus. Extinguish fires with foam, dry chemical or carbon dioxide. During a fire toxic fumes may be released. Cool sealed drums with water to prevent rupture due to thermal expansion. Contain run-off. Keep non-involved persons away.

FIRST AID

If Swallowed:	Do NOT induce vomiting. For advice contact the National Poisons Centre 0800 POISON (0800 764 766) or a doctor immediately.
If in Eyes:	Hold eyelids apart and flush the eye continuously with running water for at least 15 minutes. Get medical attention.
If on Skin:	If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Do not scrub the skin.
If Inhaled:	Remove patient to fresh air. If not breathing, give artificial respiration, preferably mouth-to-nose. Get medical attention if symptoms develop.

STORAGE AND SEGREGATION SUMMARY

Storage: Store in original container in a cool, dry, ventilated place away from direct heat or direct sunlight. Store away from foodstuffs, children and animals. Keep container sealed when not in use.

Aggregate Storage Volume Thresholds: When stored with substances of the same hazard the aggregate quantity must be considered. For full details refer to the current NZS8409 Management of Agrichemicals and the HSNO Regulations.

Location Certificate:	Hazardous Atmosphere Zone:	Number of Fire Extinguishers:	Hazard Class & Emergency Action Signage:	Emergency Information:	Emergency Plan:	Secondary Containment:
NA	NA	2 for ≥ 500L	100L	0.1L	>100L	100L

DO NOT Store or Load With:
Class 1 substances, food items

Segregate From:
Class 5.1, 5.2 (by at least 3 metres horizontally on a vehicle)
Class 5.1, 5.2, food items (in a segregation device)

Segregation: Check the latest Land Transport Rule Dangerous Goods, Rule 45001 for additional information. Sea transport may require additional segregation. Refer NZS5433 sea segregation for details.

No & Kind of Packages:	Gross Wgt:	Kg	Volume:	m³
Consignor:	Consignee:			
Dangerous Goods Declaration: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labelled, and are in all respects in proper condition for transport according to the applicable international and national rules, regulations and legislation.	Name:	Title:		Date:
	Signature:			



Material Safety Data Sheet

Page 1 of 5

Infosafe No. 3NUAO Issue Date : May 2006

ISSUED by NUFARMNZ

Product Name : **CHLORPYRIFOS 48EC**

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name CHLORPYRIFOS 48EC
Product Code 03360
Product Use Agricultural and horticultural insecticide.
Company Name Nufarm NZ
Address 2 Sterling Avenue Manurewa
Auckland 1702 New Zealand
Emergency Tel. 0800 651 911
Telephone Number/Fax Tel: 0-9-270 4157 Fax: 0-9-270 4159
Product Type Insecticide
Other Information This SDS 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. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Characterization Liquid

Ingredients	Name	CAS	Proportion
	Aromatic Hydrocarbon	64742-94-5	30-60 w/v
	Ingredients determined to be non-hazardous	-	10-30 w/v
	Chlorpyrifos	2921-88-2	480g/L

3. HAZARDS IDENTIFICATION

Other Information 3.1D flammable liquid, 6.1C acute toxicant, 6.3B skin irritant, 6.4A eye irritant, 6.9A target organ toxicant, 9.1A aquatic toxicant, 9.2B soil toxicant, 9.3A terrestrial vertebrate toxicant, 9.4A terrestrial invertebrate toxicant, FLAMMABLE
Warning - combustible liquid.
TOXICITY
Harmful - may be harmful if swallowed, inhaled or absorbed through the skin. May cause eye irritation or mild skin irritation.
Toxic - May cause nervous system damage from repeated oral or inhalation exposure at high doses.
ECOTOXIC
Very toxic to aquatic organisms. Toxic to the soil environment. Very toxic to terrestrial vertebrates and terrestrial invertebrates. Toxic to bees.

4. FIRST AID MEASURES

Inhalation Remove patient to fresh air. Lay down and keep warm and rested. If breathing is shallow or has stopped ensure airway is clear and apply resuscitation. Seek medical assistance immediately.

Ingestion Never give anything by mouth to an unconscious person. If swallowed do NOT induce vomiting. For advice, contact the National Poisons Centre (0800 764 766). Seek medical assistance immediately.

Skin Immediately flush body and clothes with large amounts of water. Remove contaminated clothing and footwear. Wash affected areas with soap and water. If a large area is affected seek medical assistance. Do not scrub the skin.

Eye Flush eyes with plenty of water for 15 minutes holding eyelids open if necessary. Seek medical assistance.

First Aid Facilities Facilities storing or utilizing this material should be equipped with an eyewash facility and safety shower.



Material Safety Data Sheet

Infosafe No. 3NUAO Issue Date : May 2006 ISSUED by NUFARMNZ

Product Name : **CHLORPYRIFOS 48EC**

Advice to Doctor Initial Treatment: Atropine is the specific antidote. Large amounts are required in organophosphate poisoning. An initial trial dose of atropine 2mg intravenously should be given and repeated every 15 minutes until an atropine effect is noted (diluted pupils, dry mouth, flushing of the skin). Reduce to a schedule that maintains full atropinisation for at least 24 hours. The dose and frequency of atropine will vary from case to case.
Medical: Take blood samples for cholinesterase levels before starting treatment. Stomach washout if organophosphate has been ingested. Pralidoxime enhances the reactivation of acetyl cholinesterase. It is most effective if given early, but can still be started up to 48 hours after poisoning. Pralidoxime is given at a dose of 1-2mg by slow I.V. infusion at a maximum rate of 0.5gm/min. It is used as an adjunct to, not a replacement for Atropine. Respiratory Difficulty - Carefully monitor for 24 hours. Convulsions - Control with Diazepam (Valium) 5-10mg by slow I.V. or I.M. repeat as necessary.

5. FIRE FIGHTING MEASURES

Extinguishing Media Water fog, foam, carbon dioxide or dry chemical.
Specific Methods Keep up wind. Do not allow washings to reach sewage or effluent systems. Cool drums, keeping at a safe distance in case of an explosion.
Hazardous Combustion Products If involved in a fire, it may emit various oxides and derivatives of phosphoric acids, sulphur, nitrogen, hydrogen chloride and phosgene.
Unsuitable Extinguishing Media Do not use water in a jet.
Protective Equipment Full protective clothing and self-contained breathing apparatus.
Other Information Hazchem Code: 2XE
Location Certificate: Not applicable
Hazardous Atmosphere Zone: Not applicable
Number of Fire Extinguishers: 2 for 500L or more

6. ACCIDENTAL RELEASE MEASURES

Spills & Disposal Wear protective clothing. Clear area of unprotected personnel. Eliminate all ignition sources and naked lights. Use non-sparking utensils. Contain spill and absorb with sand, soil or absorbent granules. If spill does enter waterways contact the local authority. Collect in an appropriate sealable container for disposal in an approved landfill.
Personal Protection For appropriate personal protective equipment (PPE), refer Section 8.
Environmental Precautions Prevent from entering drains, waterways or sewers.

7. HANDLING AND STORAGE

Handling Avoid skin and eye contact and inhalation of spray mist.
APPROVED HANDLER: This product must be under the control of an approved handler or secured unless it is being transported by a person with an endorsed dangerous goods licence.
TRACKING: Location and movement of this product must be recorded at each stage of its lifecycle.
RECORD KEEPING: Records of use as described in the NZS 8409 Management of Agrichemicals must be kept.
Storage Do not store near heat or flame.
Store in original container tightly closed and in a locked, dry, cool area away from sources of ignition and foodstuffs. Storage must be in accordance with NZS 8409 Management of Agrichemicals. Do not store with Class 1, 2, 3.2, 4 or 5 substances.
Stores containing 100L of Chlorpyrifos 48EC require secondary containment and are subject to signage, and more than 100L requires emergency response plans. Stores containing 500 litres of this substance must have at least 2 fire extinguishers.



Material Safety Data Sheet

Page 3 of 5

Infosafe No. 3NUAO Issue Date : May 2006 ISSUED by NUFARMNZ

Product Name : **CHLORPYRIFOS 48EC**

Other Information Always read the label and any attached leaflet before use.
Aggregate Storage Volume Thresholds:
When stored with substances of the same hazard classification the aggregate quantity must be considered. For full details refer to the current NZS8409 Management of Agrichemicals and the HSNO Regulations.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

National Exposure Standards No exposure limits (WES, TEL or EEL's) have been specifically assigned for this product.
WES TWA for chlorpyrifos technical = 0.2mg/m³ for skin

Personal Protective Equipment When opening the container, preparing spray and using the prepared spray wear safety goggles, PVC overalls (worn outside boots), PVC gloves, PVC hat, boots, and a NIOSH approved half face mask with organic vapour cartridge + dust/mist prefilter.

Eng. Controls Handle in well ventilated areas, generally natural ventilation is adequate.

Hygiene Measures Do not eat, drink or smoke while using.
Remove protective clothing and wash hands and face thoroughly before meals and after work. Wash protective clothing daily after work.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Amber liquid

Solubility in Water Miscible. Forms an emulsion
(chlorpyrifos technical = 1.4mg/L @ 25°C)

Specific Gravity (H₂O=1) 1.088g/mL @ 20°C

pH Value ~ 7.5 @ 5%

Vapour Pressure Not determined (1.5mm Hg @ 20°C, for solvent)

Vapour Density (Air=1) Not determined (>1 for solvent)

Flash Point 70 °C

Other Information (EC) Emulsifiable concentrate

10. STABILITY AND REACTIVITY

Stability When stored appropriately this product should show no significant degradation for five and a half years from the date of manufacture.

Hazardous Polymerization Hazardous polymerisation will not occur.

Materials to Avoid Avoid contact of the concentrate with strong alkalis and alkaline materials such as lime.
Avoid contact of the concentrate with strong acids.
50% decomposition of an aqueous-alcoholic solution occurs in ca. 7 days at pH 10.

Conditions to Avoid Avoid strong acid or alkali. Avoid oxidising agents. Under adverse conditions, the concentrate may react strongly with powerful oxidising agents.

11. TOXICOLOGICAL INFORMATION

Toxicology Information No specific toxicological data is available for this product. Data below is for constituents.

Inhalation When applying the product as a spray avoid breathing in spray mist.
Breathing in high concentrations of vapour can produce central nervous system depression, which can lead to loss of coordination, impaired judgement and if exposure is prolonged, unconsciousness.

Ingestion Possible symptoms of exposure include: nausea, vomiting and central nervous system depression.
If aspirated into the lung, e.g. from vomiting, the presence of solvent may result in chemical pneumonitis or pulmonary oedema.



Material Safety Data Sheet

Page 4 of 5

Infosafe No. 3NUAO Issue Date : May 2006 ISSUED by NUFARMNZ

Product Name : **CHLORPYRIFOS 48EC**

Skin	The rate of absorption for chlorpyrifos is low hence, the product is moderately toxic by this route. Prolonged contact with the concentrate can cause defatting of the skin and may result in dermatitis.
Eye	The concentrate may cause irritation of the eyes.
Chronic Effects	Regular exposure may result in lowering of cholinesterase activity which will recover within a few days after exposure ceases.
Reproductive Toxicity	Data indicates no reproductive effects. Data indicates no teratogenic effects.
Carcinogenicity	Data indicates no carcinogenic effects.
Acute Toxicity - Oral	LD50 (rat) 135-163 mg/kg for chlorpyrifos
Acute Toxicity - Dermal	LD50 (rat) >2000 mg/kg for chlorpyrifos
Acute Toxicity - Inhalation	LC50 (rat) (4hr) >0.2 mg/l for chlorpyrifos
Subchronic/Chronic Toxicity	NOEL 2yr feeding trial: rat = 1 mg/kg/day
Other Information	The Australian Acceptable Daily Intake (ADI) for chlorpyrifos for a human is 0.003 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 0.03 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, 'ADI List', TGA, December 2004).

12. ECOLOGICAL INFORMATION

Known Harmful Effects on the Environment	The product is a marine pollutant for sea transport.
Basis for Assessment	Ecotoxicological data have not been determined specifically for this product. Data below is for the active ingredient unless otherwise stated.
Persistence / Degradability	Average field half life of chlorpyrifos is 33 - 56 days.
Acute Toxicity - Fish	LC50 (96 hr) for bluegill sunfish is 0.002 - 0.10 mg/l.
Acute Toxicity - Daphnia	LC50 (48hr) for daphnia is 1.7 µg/l
Acute Toxicity - Algae	NOEC for Selenastrum capricornutum >0.4mg/L
Acute Toxicity - Other Organisms	LD50 for chickens is 32-102 mg/kg LD50 (contact) 0.07µg/bee; (oral) 0.36µg/bee.
Environmental Fate	In soil chlorpyrifos is slowly degraded with a half-life of ca. 60-120 days, to 3,5,6-trichloropyridin-2-ol, which is subsequently degraded to organochlorine compounds and carbon dioxide. In animals, following oral administration, rapid metabolism occurs, with the principle metabolites being 3,5,6-trichloro-2-pyridinol and monoethyl chlorpyrifos. Excretion is principally in the urine.

13. DISPOSAL CONSIDERATIONS

Product Disposal	Dispose of product only by using according to the label, or at an approved landfill.
Container Disposal	Triple rinse empty container and add rinsate to spray tank. Crush and bury in suitable landfill.

14. TRANSPORT INFORMATION

	It is good practice to separate this product from food, food related materials, animal feedstuffs, seed or fertilisers during transport.
U.N. Number	3018
Proper Shipping Name	ORGANOPHOSPHORUS PESTICIDE, LIQUID, TOXIC - (chlorpyrifos, 48%)



Material Safety Data Sheet

Page 5 of 5

Infosafe No. 3NUAO Issue Date : May 2006 ISSUED by NUFARMNZ

Product Name : **CHLORPYRIFOS 48EC**

DG Class 6.1
Hazchem Code 2XE
Packaging Method -
Packing Group III
EPG Number -
IERG Number 35
IMO Marine Pollutant Yes. Marine Pollutant mark required.
Other Information Do not carry this product on a passenger service vehicle.
Segregation: Check the latest Land Transport Rule Dangerous Goods, Rule 45001 for additional information. Sea transport may require additional segregation. Refer NZS5433 sea segregation for details.

15. REGULATORY INFORMATION

Packaging & Labelling WARNING - combustible liquid
TOXIC * ECOTOXIC - keep out of reach of children
Hazard Rating Systems NFPA/HMIS: 3-2-1
National Legislation Registered pursuant to the ACVM Act, 1997, No. P3331
See www.nzfsa.govt.nz/acvm/ for registration conditions
Approved pursuant to the HSNO act 1996, Approval Code HSR000224
See www.ermanz.govt.nz for approval controls

16. OTHER INFORMATION

Contact Person/Point IN AN EMERGENCY, DIAL 111 - FIRE OR POLICE
24Hr Tollfree Emergency No: 0800 651 911
24Hr Emergency No: National Poisons Centre Phone: 0800 764 766
Revisions Highlighted The SDS was reviewed to include HSNO requirements.
Other Information Supersedes SDS issued 02/06/98
...End Of MSDS...



NUFARM NZ DANGEROUS GOODS PRODUCT LISTING

SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (MCPA)	HAZARD CLASS 9	UN No. 3082
TRADE NAME AGRITONE 720	HAZCHEM 2X	PACKING GROUP III
ADDITIONAL INFORMATION 720g/L MCPA, Herbicide, Marine Pollutant (ERP Guide – Refer guide number 47)		
		FLASHPOINT°C NA

SHIPPING NAME FLAMMABLE LIQUID, N.O.S. (hydrocarbon)	HAZARD CLASS 3	UN No. 1993
TRADE NAME ATTACK	HAZCHEM 3W	PACKING GROUP III
ADDITIONAL INFORMATION 475g/L Pirimiphos-methyl, 25g/L Permethrin, Insecticide, Marine Pollutant (ERP Guide – Refer guide number 14)		
		FLASHPOINT°C 56

SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (daminozide)	HAZARD CLASS 9	UN No. 3077
TRADE NAME B-NINE SP	HAZCHEM 2X	PACKING GROUP III
ADDITIONAL INFORMATION 850g/kg daminozide, Plant Growth Regulator, Marine Pollutant (ERP Guide – Refer guide number 47)		
		FLASHPOINT°C NA

SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (cyproconazole)	HAZARD CLASS 9	UN No. 3082
TRADE NAME ALTO 100SL	HAZCHEM 2X	PACKING GROUP III
ADDITIONAL INFORMATION 100g/L Cyproconazole, Fungicide, Marine Pollutant (ERP Guide – Refer guide number 47)		
		FLASHPOINT°C NA

SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (tri-alle)	HAZARD CLASS 9	UN No. 3082
TRADE NAME AVADEX XTRA	HAZCHEM 2X	PACKING GROUP III
ADDITIONAL INFORMATION 500g/L Tri-alle, Herbicide, Marine Pollutant (ERP Guide – Refer guide number 47)		
		FLASHPOINT°C NA

SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bromoxynil)	HAZARD CLASS 9	UN No. 3082
TRADE NAME BROMICIDE MA	HAZCHEM 2Z	PACKING GROUP III
ADDITIONAL INFORMATION 200g/L Bromoxynil, 200g/L MCPA, Herbicide (ERP Guide – Refer guide number 47)		
		FLASHPOINT°C NA

SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (clopyralid)	HAZARD CLASS 9	UN No. 3082
TRADE NAME ARCHER	HAZCHEM 2X	PACKING GROUP III
ADDITIONAL INFORMATION 300g/L Clopyralid, Herbicide, Marine Pollutant (ERP Guide – Refer guide number 47)		
		FLASHPOINT°C NA

SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (chlorothalonil)	HAZARD CLASS 9	UN No. 3082
TRADE NAME BARRACK 720	HAZCHEM 2X	PACKING GROUP III
ADDITIONAL INFORMATION 720g/L Chlorothalonil, Fungicide, Marine Pollutant (ERP Guide – Refer guide number 47)		
		FLASHPOINT°C NA

SHIPPING NAME PESTICIDE, LIQUID, TOXIC, N.O.S. (captan)	HAZARD CLASS 6.1	UN No. 2902
TRADE NAME CAPTAN FLO	HAZCHEM 2XE	PACKING GROUP III
ADDITIONAL INFORMATION 480g/L Captan, Fungicide, Marine Pollutant (ERP Guide – Refer guide number 34)		
		FLASHPOINT°C NA

SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (metsulfuron-methyl)	HAZARD CLASS 9	UN No. 3077
TRADE NAME ASSOCIATE 600 WDG	HAZCHEM 2X	PACKING GROUP III
ADDITIONAL INFORMATION 600g/kg Metsulfuron-methyl, Herbicide, Marine Pollutant (ERP Guide – Refer guide number 47)		
		FLASHPOINT°C NA

SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2,4-D)	HAZARD CLASS 9	UN No. 3077
TRADE NAME BATON	HAZCHEM 2X	PACKING GROUP III
ADDITIONAL INFORMATION 800g/kg 2,4-D, Herbicide, Marine Pollutant (ERP Guide – Refer guide number 47)		
		FLASHPOINT°C NA

SHIPPING NAME CARBAMATE PESTICIDE, LIQUID, TOXIC (carbaryl)	HAZARD CLASS 6.1	UN No. 2992
TRADE NAME CARBARYL 50F	HAZCHEM 2XE	PACKING GROUP III
ADDITIONAL INFORMATION 500g/L Carbaryl, Insecticide, Marine Pollutant (ERP Guide – Refer guide number 34)		
		FLASHPOINT°C NA

NUFARM NZ DANGEROUS GOODS PRODUCT LISTING CONT.

SHIPPING NAME ORGANOPHOSPHORUS PESTICIDE, LIQUID, TOXIC, FLAMMABLE (fenitrothion)	HAZARD CLASS 6.1, 3	UN No. 3017
TRADE NAME CATERKIL 1000	HAZCHEM 2WE	PACKING GROUP III
ADDITIONAL INFORMATION 100g/L Fenitrothion, 160g/L Hydrocarbon Liquid, Insecticide Marine Pollutant (ERP Guide – Refer guide number 17)		
		FLASHPOINT°C 34

SHIPPING NAME ORGANOPHOSPHORUS PESTICIDE, SOLID, TOXIC, (phorate)	HAZARD CLASS 6.1	UN No. 2783
TRADE NAME CROP CARE PHORATE 20G	HAZCHEM 2XE	PACKING GROUP II
ADDITIONAL INFORMATION 200g/kg Phorate, Insecticide, Marine Pollutant (ERP Guide – Refer guide number 35)		
		FLASHPOINT°C NA

SHIPPING NAME ORGANOPHOSPHORUS PESTICIDE, SOLID, TOXIC (diazinon)	HAZARD CLASS 6.1	UN No. 2783
TRADE NAME DIAZINON 50W	HAZCHEM 2WE	PACKING GROUP III
ADDITIONAL INFORMATION 500g/kg Diazinon, Insecticide, Marine Pollutant (ERP Guide – Refer guide number 35)		
		FLASHPOINT°C NA

SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (copper)	HAZARD CLASS 9	UN No. 3077
TRADE NAME CHAMP DP	HAZCHEM 2X	PACKING GROUP III
ADDITIONAL INFORMATION 375g/kg Copper, Fungicide, Marine Pollutant (ERP Guide – Refer guide number 47)		
		FLASHPOINT°C NA

SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (copper)	HAZARD CLASS 9	UN No. 3077
TRADE NAME CUPROFLOX DISPERS	HAZCHEM 2X	PACKING GROUP III
ADDITIONAL INFORMATION 200g/kg Copper, Fungicide, Marine Pollutant (ERP Guide – Refer guide number 47)		
		FLASHPOINT°C NA

SHIPPING NAME ORGANOPHOSPHORUS PESTICIDE, LIQUID, TOXIC, FLAMMABLE (diazinon)	HAZARD CLASS 6.1, 3	UN No. 3017
TRADE NAME DIAZINON 800	HAZCHEM 2WE	PACKING GROUP III
ADDITIONAL INFORMATION 800g/L Diazinon, Insecticide, Marine Pollutant (ERP Guide – Refer guide number 17)		
		FLASHPOINT°C 47

SHIPPING NAME ORGANOPHOSPHORUS PESTICIDE, LIQUID, TOXIC (chlorpyrifos)	HAZARD CLASS 6.1	UN No. 3018
TRADE NAME CHLORPYRIFOS 48EC	HAZCHEM 2XE	PACKING GROUP III
ADDITIONAL INFORMATION 480g/L Chlorpyrifos, Insecticide, Marine Pollutant (ERP Guide – Refer guide number 35)		
		FLASHPOINT°C NA

SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (diazinon)	HAZARD CLASS 9	UN No. 3082
TRADE NAME DEW 500	HAZCHEM 2X	PACKING GROUP III
ADDITIONAL INFORMATION 500g/L Diazinon, Insecticide, Marine Pollutant (ERP Guide – Refer guide number 47)		
		FLASHPOINT°C NA

SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (diflubenzuron)	HAZARD CLASS 9	UN No. 3077
TRADE NAME DIMILIN 25W	HAZCHEM 2Z	PACKING GROUP III
ADDITIONAL INFORMATION 250g/kg Diflubenzuron, Insecticide, Marine Pollutant (ERP Guide – Refer guide number 47)		
		FLASHPOINT°C NA

SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (captan)	HAZARD CLASS 9	UN No. 3077
TRADE NAME CROP CARE CAPTAN WG	HAZCHEM 2X	PACKING GROUP III
ADDITIONAL INFORMATION 800g/kg Captan, Insecticide, Marine Pollutant (ERP Guide – Refer guide number 47)		
		FLASHPOINT°C NA

SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (diazinon)	HAZARD CLASS 9	UN No. 3077
TRADE NAME DIAZINON 20G	HAZCHEM 2XE	PACKING GROUP III
ADDITIONAL INFORMATION 200g/kg Diazinon, Insecticide, Marine Pollutant (ERP Guide – Refer guide number 47)		
		FLASHPOINT°C NA

SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bacillus thuringiensis var. kurstaki)	HAZARD CLASS 9	UN No. 3082
TRADE NAME DIPEL ES	HAZCHEM 2X	PACKING GROUP III
ADDITIONAL INFORMATION 16.9 million international units/mL bacillus thuringiensis var. kurstaki, Insecticide, Marine Pollutant (ERP Guide – Refer guide number 47)		
		FLASHPOINT°C NA

NUFARM NZ DANGEROUS GOODS PRODUCT LISTING CONT.

SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (dodine)	HAZARD CLASS 9	UN No. 3082
TRADE NAME DODINE 400	HAZCHEM 2X	PACKING GROUP III
ADDITIONAL INFORMATION 400g/L Dodine, Fungicide, Marine Pollutant (ERP Guide – Refer guide number 47)		FLASHPOINT°C NA

SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (terbutylazine)	HAZARD CLASS 9	UN No. 3082
TRADE NAME GARDOPRIM	HAZCHEM 2X	PACKING GROUP III
ADDITIONAL INFORMATION 500g/L Terbutylazine, Herbicide, Marine Pollutant (ERP Guide – Refer guide number 47)		FLASHPOINT°C NA

SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (dicamba)	HAZARD CLASS 9	UN No. 3082
TRADE NAME KAMBA 500	HAZCHEM 2X	PACKING GROUP III
ADDITIONAL INFORMATION 500g/L Dicamba, Herbicide, Marine Pollutant (ERP Guide – Refer guide number 47)		FLASHPOINT°C NA

SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (bromoxynil)	HAZARD CLASS 9	UN No. 3077
TRADE NAME EMBLEM	HAZCHEM 2Z	PACKING GROUP III
ADDITIONAL INFORMATION 200g/kg Bromoxynil, Herbicide, Marine Pollutant (ERP Guide – Refer guide number 47)		FLASHPOINT°C NA

SHIPPING NAME CORROSIVE LIQUID, N.O.S. (hydrogen cyanamide)	HAZARD CLASS 8, 6.1	UN No. 2922
TRADE NAME HI-CANE	HAZCHEM 2WE	PACKING GROUP III
ADDITIONAL INFORMATION 520g/L Hydrogen Cyanamide, Plant Growth Regulator (ERP Guide – Refer guide number 37)		FLASHPOINT°C NA

SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (alachlor)	HAZARD CLASS 9	UN No. 3082
TRADE NAME LASSO MICRO-TECH	HAZCHEM 2X	PACKING GROUP III
ADDITIONAL INFORMATION 480g/L Alachlor, Herbicide, Marine Pollutant (ERP Guide – Refer guide number 47)		FLASHPOINT°C NA

SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (atrazine)	HAZARD CLASS 9	UN No. 3082
TRADE NAME FLOWABLE ATRAZINE	HAZCHEM 2X	PACKING GROUP III
ADDITIONAL INFORMATION 500g/L Atrazine, Herbicide, Marine Pollutant (ERP Guide – Refer guide number 47)		FLASHPOINT°C NA

SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (lambda-cyhalothrin)	HAZARD CLASS 9	UN No. 3077
TRADE NAME ICON	HAZCHEM 2Z	PACKING GROUP III
ADDITIONAL INFORMATION 100g/kg Lambda-cyhalothrin, Insecticide, Marine Pollutant (ERP Guide – Refer guide number 47)		FLASHPOINT°C NA

SHIPPING NAME FLAMMABLE LIQUID, N.O.S. (calcium dodecylbenzene sulphonate)	HAZARD CLASS 3	UN No. 1993
TRADE NAME MALATHION 50EC	HAZCHEM 2WE	PACKING GROUP III
ADDITIONAL INFORMATION 500g/L Maldison, 450g/L aromatic hydrocarbons, Insecticide Marine Pollutant (ERP Guide – Refer guide number 14)		FLASHPOINT°C 55

SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (simazine)	HAZARD CLASS 9	UN No. 3082
TRADE NAME FLOWABLE SIMAZINE	HAZCHEM 2X	PACKING GROUP III
ADDITIONAL INFORMATION 500g/L Simazine, Herbicide, Marine Pollutant (ERP Guide – Refer guide number 47)		FLASHPOINT°C NA

SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bromoxynil, ioxynil)	HAZARD CLASS 9	UN No. 3082
TRADE NAME IMAGE	HAZCHEM 2Z	PACKING GROUP III
ADDITIONAL INFORMATION 120g/L Bromoxynil, 120g/L ioxynil, 360g/L Mecoprop-P Herbicide, Marine Pollutant (ERP Guide – Refer guide number 47)		FLASHPOINT°C NA

SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (tau-fluvalinate)	HAZARD CLASS 9	UN No. 3082
TRADE NAME MAVRIK FLO	HAZCHEM 2X	PACKING GROUP III
ADDITIONAL INFORMATION 240g/L Tau-fluvalinate, Insecticide, Marine Pollutant (ERP Guide – Refer guide number 47)		FLASHPOINT°C NA

NUFARM NZ DANGEROUS GOODS PRODUCT LISTING CONT.

SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (glyphosate)	HAZARD CLASS 9	UN No. 3082
TRADE NAME NUFARM GLYPHOSATE GOLD	HAZCHEM 2X	PACKING GROUP III
ADDITIONAL INFORMATION 360g/L Glyphosate, Herbicide, Marine Pollutant (ERP Guide – Refer guide number 47)		
		FLASHPOINT°C NA

SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (propargite)	HAZARD CLASS 9	UN No. 3077
TRADE NAME OMITE 30W	HAZCHEM 2XE	PACKING GROUP III
ADDITIONAL INFORMATION 300g/kg Propargite, Miticide, Marine Pollutant (ERP Guide – Refer guide number 47)		
		FLASHPOINT°C NA

SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (propachlor)	HAZARD CLASS 9	UN No. 3082
TRADE NAME RAMROD	HAZCHEM 2Z	PACKING GROUP III
ADDITIONAL INFORMATION 480g/L Propachlor, Herbicide, Marine Pollutant (ERP Guide – Refer guide number 47)		
		FLASHPOINT°C NA

SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (MCPB)	HAZARD CLASS 9	UN No. 3082
TRADE NAME NUFARM MCPB 400	HAZCHEM 2X	PACKING GROUP III
ADDITIONAL INFORMATION 385g/L MCPB, Herbicide, Marine Pollutant (ERP Guide – Refer guide number 47)		
		FLASHPOINT°C NA

SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (mancozeb)	HAZARD CLASS 9	UN No. 3077
TRADE NAME PENNZOZEB DF	HAZCHEM 2XE	PACKING GROUP III
ADDITIONAL INFORMATION 750g/kg Mancozeb, Fungicide, Marine Pollutant (ERP Guide – Refer guide number 47)		
		FLASHPOINT°C NA

SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,4-D)	HAZARD CLASS 9	UN No. 3082
TRADE NAME RELAY	HAZCHEM 2Z	PACKING GROUP III
ADDITIONAL INFORMATION 520g/L 2,4-D, Herbicide, Marine Pollutant (ERP Guide – Refer guide number 47)		
		FLASHPOINT°C NA

SHIPPING NAME ORGANOPHOSPHORUS PESTICIDE, SOLID, (phorate)	HAZARD CLASS 6.1	UN No. 2783
TRADE NAME NUFARM PHORATE	HAZCHEM 2XE	PACKING GROUP II
ADDITIONAL INFORMATION 200g/kg Phorate, Insecticide, Marine Pollutant (ERP Guide – Refer guide number 35)		
		FLASHPOINT°C NA

SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (simazine, amitrole)	HAZARD CLASS 9	UN No. 3077
TRADE NAME PERMAZOL SDA	HAZCHEM 2X	PACKING GROUP III
ADDITIONAL INFORMATION 400g/kg Simazine, 125g/kg Amitrole, 260g/kg 2,2-Dichloropropionic Acid, Herbicide (ERP Guide – Refer guide number 47)		
		FLASHPOINT°C NA

SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (aminoethoxyvinylglycine hydroxide)	HAZARD CLASS 9	UN No. 3077
TRADE NAME RETAIN	HAZCHEM 2X	PACKING GROUP III
ADDITIONAL INFORMATION 150g/kg Aminoethoxyvinylglycine Hydrochloride, Plant Growth Regulator, Marine Pollutant (ERP Guide – Refer guide number 47)		
		FLASHPOINT°C NA

SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (atrazine)	HAZARD CLASS 9	UN No. 3077
TRADE NAME NU-TRAZINE 900DF	HAZCHEM 2X	PACKING GROUP III
ADDITIONAL INFORMATION 900g/kg Atrazine, Herbicide, Marine Pollutant (ERP Guide – Refer guide number 47)		
		FLASHPOINT°C NA

SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (fopet)	HAZARD CLASS 9	UN No. 3077
TRADE NAME PHALTAN 50W	HAZCHEM 2Z	PACKING GROUP III
ADDITIONAL INFORMATION 500g/kg Fopet, Fungicide, Marine Pollutant (ERP Guide – Refer guide number 47)		
		FLASHPOINT°C NA

SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (tolclofos-methyl)	HAZARD CLASS 9	UN No. 3077
TRADE NAME RIZOLEX	HAZCHEM 2X	PACKING GROUP III
ADDITIONAL INFORMATION 100g/kg Tolclofos-methyl, Fungicide, Marine Pollutant (ERP Guide – Refer guide number 47)		
		FLASHPOINT°C NA

NUFARM NZ DANGEROUS GOODS PRODUCT LISTING Cont.

SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (glyphosate)	HAZARD CLASS 9	UN No. 3077
TRADE NAME ROUNDUP DRY	HAZCHEM 2X	PACKING GROUP III
ADDITIONAL INFORMATION 680g/kg Glyphosate, Herbicide, Marine Pollutant (ERP Guide – Refer guide number 47)		
		FLASHPOINT°C NA

SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (triclopyr)	HAZARD CLASS 9	UN No. 3082
TRADE NAME SCRUBCUTTER	HAZCHEM 2X	PACKING GROUP III
ADDITIONAL INFORMATION 600g/L Triclopyr, Herbicide, Marine Pollutant (ERP Guide – Refer guide number 47)		
		FLASHPOINT°C NA

SHIPPING NAME PYRETHROID PESTICIDE, LIQUID, TOXIC (esfenvalerate)	HAZARD CLASS 6.1	UN No. 3352
TRADE NAME SUMI - ALPHA	HAZCHEM 2WE	PACKING GROUP III
ADDITIONAL INFORMATION 50g/L Esfenvalerate, Insecticide, Marine Pollutant (ERP Guide – Refer guide number 35)		
		FLASHPOINT°C NA

SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (glyphosate)	HAZARD CLASS 9	UN No. 3082
TRADE NAME ROUNDUP RENEW	HAZCHEM 2X	PACKING GROUP III
ADDITIONAL INFORMATION 360g/L Glyphosate, Herbicide, Marine Pollutant (ERP Guide – Refer guide number 47)		
		FLASHPOINT°C NA

SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (halosulfuron-methyl)	HAZARD CLASS 9	UN No. 3077
TRADE NAME SEMPRA	HAZCHEM 2X	PACKING GROUP III
ADDITIONAL INFORMATION 750g/kg Halosulfuron-methyl, Herbicide, Marine Pollutant (ERP Guide – Refer guide number 47)		
		FLASHPOINT°C NA

SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (procymidone)	HAZARD CLASS 9	UN No. 3082
TRADE NAME SUMISCLEX 500SC	HAZCHEM 2X	PACKING GROUP III
ADDITIONAL INFORMATION 500g/L Procymidone, Fungicide, Marine Pollutant (ERP Guide – Refer guide number 47)		
		FLASHPOINT°C NA

SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (glyphosate)	HAZARD CLASS 9	UN No. 3082
TRADE NAME ROUNDUP TRANSORB	HAZCHEM 2X	PACKING GROUP III
ADDITIONAL INFORMATION 540g/L Glyphosate, Herbicide, Marine Pollutant (ERP Guide – Refer guide number 47)		
		FLASHPOINT°C NA

SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (fluzinam)	HAZARD CLASS 9	UN No. 3082
TRADE NAME SHIRLAN	HAZCHEM 2X	PACKING GROUP III
ADDITIONAL INFORMATION 500g/L Fluzinam, Fungicide, Marine Pollutant (ERP Guide – Refer guide number 47)		
		FLASHPOINT°C NA

SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (chlorpyrifos)	HAZARD CLASS 9	UN No. 3077
TRADE NAME SUSCON GREEN	HAZCHEM 2[Z]	PACKING GROUP III
ADDITIONAL INFORMATION 100g/kg Chlorpyrifos, Insecticide, Marine Pollutant (ERP Guide – Refer guide number 47)		
		FLASHPOINT°C NA

SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (acetochlor)	HAZARD CLASS 9	UN No. 3082
TRADE NAME ROUSTABOUT	HAZCHEM 2X	PACKING GROUP III
ADDITIONAL INFORMATION 840g/L Acetochlor, Herbicide, Marine Pollutant (ERP Guide – Refer guide number 47)		
		FLASHPOINT°C NA

SHIPPING NAME CORROSIVE LIQUID, N.O.S. (chlomequat-chloride)	HAZARD CLASS 8	UN No. 1760
TRADE NAME STABILAN 750SL	HAZCHEM 2X	PACKING GROUP III
ADDITIONAL INFORMATION 750g/L Chlomequat-chloride, Plant Growth Regulator (ERP Guide – Refer guide number 37)		
		FLASHPOINT°C NA

SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (quintozene)	HAZARD CLASS 9	UN No. 3077
TRADE NAME TERRACLOR 75WP	HAZCHEM 2[Z]	PACKING GROUP III
ADDITIONAL INFORMATION 750g/kg Quintozene, Fungicide, Marine Pollutant (ERP Guide – Refer guide number 47)		
		FLASHPOINT°C NA

NUFARM NZ DANGEROUS GOODS PRODUCT LISTING Cont.

SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (etridiazole)	HAZARD CLASS 9	UN No. 3077
TRADE NAME TERRAZOLE 35WP	HAZCHEM 2X	PACKING GROUP III
ADDITIONAL INFORMATION 350g/kg Etridiazole, Fungicide, Marine Pollutant (ERP Guide – Refer guide number 47)		FLASHPOINT°C NA

SHIPPING NAME ORGANOCHLORINE PESTICIDE, LIQUID, TOXIC (endosulfan)	HAZARD CLASS 6.1	UN No. 2996
TRADE NAME THIODAN 35EC	HAZCHEM 2WE	PACKING GROUP III
ADDITIONAL INFORMATION 350g/L Endosulfan, Insecticide, Marine Pollutant (ERP Guide – Refer guide number 34)		FLASHPOINT°C NA

SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (thiram)	HAZARD CLASS 9	UN No. 3082
TRADE NAME THIRAM 40F	HAZCHEM 2XE	PACKING GROUP III
ADDITIONAL INFORMATION 400g/L Thiram, Fungicide, Marine Pollutant (ERP Guide – Refer guide number 47)		FLASHPOINT°C NA

SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (thiram)	HAZARD CLASS 9	UN No. 3077
TRADE NAME THIRAM DF	HAZCHEM 2XE	PACKING GROUP III
ADDITIONAL INFORMATION 800g/kg Thiram, Fungicide, Marine Pollutant (ERP Guide – Refer guide number 47)		FLASHPOINT°C NA

SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (MCPA, MCPB)	HAZARD CLASS 9	UN No. 3082
TRADE NAME THISTROL PLUS	HAZCHEM 2X	PACKING GROUP III
ADDITIONAL INFORMATION 25g/L MCPA, 375g/L MCPB, Herbicide, Marine Pollutant (ERP Guide – Refer guide number 47)		FLASHPOINT°C NA

SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (trifluralin)	HAZARD CLASS 9	UN No. 3082
TRADE NAME TRIFLUR 480	HAZCHEM 2XE	PACKING GROUP III
ADDITIONAL INFORMATION 480g/L Trifluralin, Herbicide, Marine Pollutant (ERP Guide – Refer guide number 47)		FLASHPOINT°C NA

SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (MCPA, dicamba)	HAZARD CLASS 9	UN No. 3082
TRADE NAME TRIMEC	HAZCHEM 2X	PACKING GROUP III
ADDITIONAL INFORMATION 600g/L Mecoprop, 150g/L MCPA, 18.7/L Dicamba, Herbicide, Marine Pollutant (ERP Guide – Refer guide number 47)		FLASHPOINT°C NA

SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (glyphosate)	HAZARD CLASS 9	UN No. 3077
TRADE NAME TROUNCE GORSEKILLER	HAZCHEM 2X	PACKING GROUP III
ADDITIONAL INFORMATION 635g/kg Glyphosate, Herbicide, Marine Pollutant (ERP Guide – Refer guide number 47)		FLASHPOINT°C NA

SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (imazali sulphate)	HAZARD CLASS 9	UN No. 3082
TRADE NAME VINCIT FS	HAZCHEM 2X	PACKING GROUP III
ADDITIONAL INFORMATION 50g/L Flutriafol and 50g/L Imazali Sulphate, Fungicide, Marine Pollutant (ERP Guide – Refer guide number 47)		FLASHPOINT°C NA

SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (thiram)	HAZARD CLASS 9	UN No. 3082
TRADE NAME VITAFLO 200	HAZCHEM 2X	PACKING GROUP III
ADDITIONAL INFORMATION 200g/L Carboxin and 200g/L Thiram, Fungicide, Marine Pollutant (ERP Guide – Refer guide number 47)		FLASHPOINT°C NA

Use, Maintain and Store Agrichemical Application Safety Equipment

Instructions:

1. Write your name, address and the date you hand in this Assessment in the box below.
2. Answer all questions. Use more paper if required.
3. All answers must be in your own words.
4. You must show that you have achieved the standard in all elements of the unit standard.
5. If you do not attain the standard you will have an opportunity to attempt part or all of the assessment again either orally or written, after some further study.
6. If there are any questions you don't understand, or if you have any difficulty reading the questions, please ask your tutor or supervisor for some help.
7. Trainees will have access to chemical labels, product manuals and other safety information.

Student To Complete:

Student Name:	
Address:	
Date Handed In:	
Declaration:	This assessment is all my own work (Your signature)

Assessor To Complete:

Course Number/Name:	
Standard Achieved:	Yes / No (Delete One)
Assessor's Name & Signature:	
Date:	
Comments:	
Questions to Resit:	

Assessment Retake Date:	
Standard Achieved:	Yes / No (Delete One)
Assessor's Name & Signature:	

Use, Maintain and Store Agrichemical Application Safety Equipment

Unit 21561

Level 2

Credits 2

Overview: -

You are required to **SELECT**, **CHECK**, and **PUT ON** and/or operate appropriate personal protection equipment from the items on display in preparation for **MIXING** and **APPLYING** the agrichemicals for the scenario(s) given.

You may be asked questions during this assessment to clarify your understanding of the requirements.

Exercises: -

- Visually inspect the PPE displayed and notify of any faults that you find.
- Select, check wear and use PPE necessary to safely **MIX** the agrichemicals in the scenario given.
- Select, check, wear and/or operate PPE necessary to safely **APPLY** the agrichemical in the scenario given
- Demonstrate how to decontaminate, check for wear, maintain, and store all PPE that you have used.

Oral Supporting Questions (may be asked for either or both scenario): -

- a) What PPE would you remove when you start spraying?
- b) What other PPE do you need to put on when you start spraying?
- c) How are you going to clean and store the PPE you have just worn?

Suggested Scenarios (your assessor may provide you with scenarios more specific for your situation): -

1. Use Roundup to spot spray weeds in fields, garden, amenity areas etc. Use a backpack spray unit.
2. Use chlorpyrifos to spray clover flea in pasture or mealy bug in an apple orchard. You will be using a tractor mounted sprayer and the tractor does not have a cab.

3. Checklist for assessor use only:

Trainee Name:

Scenario 1: (include details of chemical and use)

Date:

Performance Criteria	Result (Circle One)
<p>Trainee visually or manually checks PPE and identifies the range of faults (as per marking schedule) verbally to the assessor. Tick all that apply: -</p> <ul style="list-style-type: none"> ▪ Holes or tears ▪ Lack of waterproofing ▪ Perished rubber, seals or other fabric ▪ Worn respirator valves and seals ▪ Respirator cartridges out of date ▪ Respirator cartridges stored in non-airtight container ▪ Dirty gear ▪ Other (list) 	<p style="text-align: center;">Met Standard</p> <p style="text-align: center;">Not Met Standard</p>
<p>For scenario 1 suitable equipment is selected and put on for mixing the chemical.</p> <ul style="list-style-type: none"> ▪ Water resistant/chemical resistant gloves ▪ Overalls or a cover up of some sort ▪ Chemical resistant footwear – with trousers or overalls worn outside the boots. ▪ <i>May use face mask or eye goggles</i> 	<p style="text-align: center;">Met Standard</p> <p style="text-align: center;">Not Met Standard</p>
<p>For scenario 1 suitable equipment is selected and put on for application of agrichemical: -</p> <ul style="list-style-type: none"> ▪ Clothing that covers the body (eg overalls) ▪ Chemical resistant boots ▪ Gloves 	<p style="text-align: center;">Met Standard</p> <p style="text-align: center;">Not Met Standard</p>
<p>For scenario 1 demonstrates or describes the procedures for cleaning and maintenance of the PPE used.</p> <ul style="list-style-type: none"> ▪ Launder washable items before using again ▪ Do not wash spray clothes with other clothes ▪ Rinse off water-proof clothing and air-dry 	<p style="text-align: center;">Met Standard</p> <p style="text-align: center;">Not Met Standard</p>

Scenario 2 (include details of chemical used, location and date)

Date:

Performance Criteria	Result (Circle One)
<p>For scenario 2 suitable equipment is selected and put on for mixing the chemical</p> <ul style="list-style-type: none"> ▪ Water resistant/chemical resistant gloves ▪ Chemical resistant footwear ▪ Respirator ▪ Chemical resistant spray suit with trouser legs worn outside boots. 	<p style="text-align: center;">Met Standard</p> <p style="text-align: center;">Not Met Standard</p>
<p>For scenario 2 suitable equipment is selected and put on for application of agrichemical:</p> <ul style="list-style-type: none"> ▪ Chemical resistant spray suit ▪ Chemical resistant boots ▪ Gloves ▪ Respirator 	<p style="text-align: center;">Met Standard</p> <p style="text-align: center;">Not Met Standard</p>
<p>For scenario 2 demonstrate or describes the procedures for cleaning and maintenance of the PPE used.</p> <ul style="list-style-type: none"> ▪ Launder washable items before using again ▪ Do not wash spray clothes with other clothes ▪ Rinse off spray suit and air-dry ▪ Wipe down exposed surfaces of respirator cartridges. ▪ Remove cartridges and store in air-tight container ▪ Wash respirator and air-dry ▪ All washings disposed of appropriately (to waste ground etc). 	<p style="text-align: center;">Met Standard</p> <p style="text-align: center;">Not Met Standard</p>

MARKING SCHEDULE

Use, Maintain and Store Agrichemical Application Safety Equipment

Unit 21561

Level 2

Credits 2

This assessment is based on a mock up situation for a given scenario but could easily be applied to use of equipment in the workplace.

Notes to Assessors:

You will need to provide the following: -

- Chemical containers or labels and appropriate safety data sheets (note you need to supply at least one chemical that requires use of a respirator to meet range requirements for PC)
- A scenario or scenarios for use of the chemical/s supplied (some labels etc for Round Up and Chorpyrifos and scenarios have been supplied with this assessment material but you may substitute anything suitable for your situation).
- A range of PPE which is to include all the necessary items required by the chemical label/s and the scenario that has been set, plus items that are not required, items that are faulty or perished and items that are not suitable for the scenario (should include items that are over the top and items that are not up to spec such as string gloves and the like).

Assessment Conditions: -

- The evidence collected must be for individuals. Where groups are being assessed the rest of the group must be out of earshot and sight of the person being assessed.

Question	Element	Evidence	Judgement
1	1.1	<p>Trainee visually or manually checks PPE that is available and notifies faults verbally to assessor. Examples of faults that may be identified from the gear provided are given below. (Assessors should list the actual faults that the trainee is expected to find from the equipment that is provided)</p> <ul style="list-style-type: none"> ▪ holes, tears are identified ▪ Waterproofing is tested and reported ▪ Perishing of rubber or deterioration of other fabrics is identified. ▪ Non operational fasteners are identified. ▪ Worn Respirator valve and seals are identified by press test ▪ Respirator Cartridges are checked and within time used and age limits. ▪ Respirator cartridges that have not been stored in airtight plastic containers are discarded. ▪ Materials that are not chemical resistant. ▪ Dirty gear is identified. 	<p>All PPE inspected and faults identified.</p>

Question	Element	Evidence	Judgement
2	1.2	<p>Suitable PPE is selected, worn and demonstrated for use when mixing the chemical provided in the scenario. Suitable Equipment selected includes: -</p> <ul style="list-style-type: none"> • Gloves are water repellent material (must have these), ▪ Boots are chemical resistant and non-absorbent. ▪ Boots fitted correctly and worn under trousers/overalls ▪ Respirator (where required) is checked for up-to-date cartridges holes etc and must be fitted correctly and snugly to face. ▪ Face mask (in some circumstances) ▪ Eye goggles (in some circumstances) ▪ Overalls and or overtrousers <p>Note for Chlorpyrifos full protective clothing including respirator is selected as well as chemical resistant spray suit which must be worn with legs outside boots. For Round up respirator and full spray suit are not required for mixing overalls are suitable.</p>	<p>Appropriate PPE selected and used for scenario when mixing.</p> <p>Must demonstrate selection and use of respirator and then any 4 of waterproof gloves, chemical resistant boots, overalls, overtrousers, face mask</p>
3	1.2	<p>Suitable PPE is selected, worn and used for application of agrichemicals and is suitable for the agrichemical being used and the scenario under which it is being used</p> <ul style="list-style-type: none"> ▪ Depending on the chemical used and the application scenario may require wear respirator or face mask. (Not required if using weed wiper herbicide application) (Respirator required for use with Chlorpyrifos) ▪ Depending on the chemical used and the application scenario may require the use of the following items: Chemical resistant spray suit (e.g. for use with an orchard sprayer), waterproof gloves. All required for use with chlorpyrifos, not required for Roundup. <p>In all cases chemical resistant footwear must be worn, clothing that covers arms, torso, legs (preferably overalls or otherwise clothing that is immediately taken off and washed after use).</p>	<p>Appropriate PPE selected and used for scenario when applying.</p> <p>Must demonstrate selection and use of respirator and then any 4 of gloves, chemical resistant boots, overalls, overtrousers, face mask</p>
4	2	<p>PPE is decontaminated and/or washed after use, checked for wear and stored appropriately</p> <ul style="list-style-type: none"> ▪ Dispose of single use items. <p>Washable clothing:</p> <ul style="list-style-type: none"> ▪ Launder washable items separately. (Do not wear again until washed) <p>Waterproof items:</p> <ul style="list-style-type: none"> ▪ Decontaminate initially while wearing if appropriate <p>Remove solids, rinse down.</p> <ul style="list-style-type: none"> ▪ If contaminated inside consider disposal ▪ Rinse down. ▪ Rinse and wipe; air dry in sun. <p>Respirator:</p> <ul style="list-style-type: none"> ▪ Wipe down exposed surfaces of filter cartridges remove and store in airtight bag. ▪ Wash body of respirator and air-dry in sun. ▪ Dispose of washings appropriately – i.e. to waste ground etc. 	<p>All PPE displayed is decontaminated, checked, maintained & stored appropriately.</p>