1. Preparation	IDEN'	TIFICATION TOUCHE			
rieparation	•	TOUCHE			
Supplier	:	Nomix Enviro Ltd,Portland Building,Portland Street, Staple Hill, Bristol BS16 4PS.Tel. 0117 9574 574Fax. 0117 9563 461			
Chemical Emergency Agency Service (24 hr): Tel. 01865 407 333					
2.	COM	POSITION/INFORMATION ON INGREDIENTS			
Composition ISOPROPYLAMINE SALT C salt of Glyphosate)	: OF N-(PHOSPHONOMETHYL) GLYCINE (Isopropylamine 145.3 g/l (13.3% w/w) (Equivalent to 109 g/l glyphosate)				
CAS No. 38641-94-0		(Equivalent to 10) gr gippiosate)			
N'-(3,4-DICHLOROPHENYI (Diuron) CAS NO. 330-54-1	.)-N,N-I	DIMETHYLUREA 217.6 g/l (20% w/w)			
Other formulating ingredients:		66.7% w/w.			
Registration No:	07913	i de la constante de la constan			
3.	HAZA	ARDS IDENTIFICATION			
Human health effects: On the basis of available information, this material is not expected to produce any significant adverse health effects when recommended use instructions are followed.					
		nis material is not expected to produce any significant commended use instructions are followed.			
4.	FIRST	Γ-AID MEASURES			
Never give fluids or induce v	omiting	g if patient is unconscious or is having convulsions.			
Inhalation: Remove patient to fresh air. If	breathing	g is difficult give oxygen. Obtain medical advice.			
	g. Wash	clothing. If spilled into boots, immediately remove a immediately with plenty of soap and water if before re-use.			
Eye Contact:					

Rinse immediately with plenty of water. Obtain medical advice if symptoms persist.

Ingestion:

Do not induce vomiting. Obtain medical attention immediately.

Medical Advice:

MATERIAL SAFETY DATA SHEET

TOUCHE

Over exposure symptoms: No symptoms indicative of systemic poisoning with this product.Do not empty stomach without effective airway protection. No specific antidote. Treat symptomatically.

5.

FIREFIGHTING RELEASE MEASURES

Flammability :

Not applicable. Non flammable product.

Procedure:

Isolate the hazard area and prevent entry. Wear self-contained positive breathing apparatus and full fire-fighting protective clothing. Decontaminate emergency personnel when leaving fire area.

Extinguishing type:

Keep containers cool by spraying with water if exposed to fire. Extinguish preferably with foam, dry chemical, CO_2 or water spray. Use as little water as possible.

Dyke other areas to prevent pesticide run-off.

6.

ACCIDENTAL RELEASE MEASURES

Personal precautions:

Use personal protection recommended in section 8.

Environmental precautions :

Contain liquid spillage with sand or other means to prevent entry into drains.

Methods for cleaning up:

Absorb in earth or sand.Sweep up into containers for disposal.Dig up heavily contaminated soil and place in drums.(Refer to section 10 for types of containers and drums). Wash spill area with soap and water.Refer to section 13 for disposal of spilled material.

7.

HANDLING AND STORAGE

Handling: Good industrial practice in housekeeping and personal hygiene should be followed. Do not breath gas, fumes, vapour or spray. When using do not eat, drink or smoke. Wash hands immediately after handling. Thoroughly clean equipment after use.

Storage:

Keep out of reach of children. Keep away from food, drink and animal feeding stuffs. Keep container tightly closed. Keep only in the original container. Store between 0°C and 30°C. Minimum expected shelf life stored at ambient temperatures: 2 years.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION Occupational exposure limits:

	Long term exp	Short term exposure limit			
	(8 hour TWA referen	(8 hour TWA reference period)(10 minute reference period)			
	ppm	mg m ⁻³	ppm	mg m ⁻³	
Diuron	-	10	-	-	
Glyphosate	None	None assigned		None assigned	

Engineering measures:

See section 10 - "Materials to avoid" for equipment.

Respiratory protection:

MATERIAL SAFETY DATA SHEET

TOUCHE

No special requirement when used as recommended owing to the engineering controls provided when using the Nomix applicator. If at any other time exposure is expected to vapour or spray, wear suitable respiratory protective device.

Hand protection:

No special requirement during handling or application

Eye protection:

No special requirement when used as recommended.

Skin protection:

When applying, wear suitable impermeable protective clothing and impermeable coverall or impermeable trousers and rubber boots. Wear trousers outside boots.

9.	PHYSICAL AND CHEMICAL PROPERTIES	
Appearance	: Opaque	
Colour	: White liquid	
Odour	: Oil-like	
Flash Point	: $> 100^{\circ}$ C. Non flammable	
Specific Gravity	: $1.083 \text{ at } 20^{\circ} \text{C}$	
pH	: 4.1	
Solubility in water	: Completely miscible - disperses	
<u> </u>	STABILITY AND REACTIVITY	
Conditions to avoid	: Not applicable.	

Materials to avoid and hazardous decomposition products:

This material will react with galvanised or unlined steel (except stainless steel) to produce hydrogen, a highly flammable gas that can cause explosions. Avoid contact with galvanised steel or unlined steel. Should be stored in the ready-to-use pack.

TOXICOLOGICAL INFORMATION

Formulation: Oral LD₅₀ (rat) : > 5000 mg/kg.

11.

Dermal LD_{50} (rat) : >2 000 mg/kg. Not harmful in contact with skin.

Eye irritation : score 3 (rabbit, 24 h): 0 for redness, 0 for swelling, 0 for corneal opacity and 0 for damage to the iris - Not irritating to eyes.

Skin irritation : scores 3 (rabbit, 4h) : 1/1/0/33 for redness; 0.33/0/0 for swelling - Not irritating to skin. Not sensitising to skin.

Human Experience:

If swallowed, may cause gastrointestinal tract irritation (discomfort, nausea, vomiting, diarrhoea). If large quantities of the concentrated product are swallowed, may result in hypotension and pulmonary edema.

12.ECOLOGICAL INFORMATIONIsopropylamine salt of glyphosateAquatic toxicity:96h LD50 Bluegill sunfish Lepomis macrochirus) = > 1 000 mg/l.96h LD50 Rainbow Trout Oncorhynchus mykiss = > 1 000 mg/l.

MATERIAL SAFETY DATA SHEET

TOUCHE

48 EC₅₀.Water Flea (Daphnia magna) = 930 mg/l.

Wildlife toxicity:

14 day LC₅₀. Earthworm (Eisenia foetida foetida) = > 5000 mg/kg.

Bioaccumulation:

Glyphosate does not bioaccumulate.

<u>Diuron</u>

Aquatic toxicity:

96h LC₅₀ Rainbow trout (Oncorhynchus mykiss) = 4.9 mg/l.

96h LC₅₀ Bluegill sunfish (Lepomis macrochirus) = 8.2 mg/l.

24 h EC₅₀: Water Flea (Daphnia magna) = 1.4 mg/l.

13.

DISPOSAL CONSIDERATIONS

Product: Send in special chemical waste disposal facility or burn only in special, controlled high temperature incinerator.

Container:

Dispose of container through a reputable waste disposal contractor.Do not contaminate waterways, ponds or ditches with waste product or container.

14.	TRANSPORT INFORMATION
ADR Class/Conveyance class	ss: 9
Packing group:	III
UN No:	3082

Environmentally Hazardous Substance

15.

REGULATORY INFORMATION

This product is covered by the Control of Pesticides Regulations (1986) and has been labelled in accordance with these regulations.

Hazard Symbol:		Xn, Harmful N, Dangerous for the environment	
Risk Phrases:	R40 R51 R53	Possibility of irreversible effects Toxic to aquatic organisms. May cause long term adverse effects in the aquatic environment	

Safety Phrases:

WEAR SUITABLE PROTECTIVE CLOTHING (IMPERMEABLE COVERALL OR IMPERMEABLE TROUSERS) AND RUBBER BOOTS when applying the product. DO NOT BREATHE SPRAY. WASH ALL PROTECTIVE CLOTHING thoroughly after use, especially the insides of gloves. WASH ANY CONTAMINATION from skin or eyes immediately. WASH HANDS AND EXPOSED SKIN before meals and after work.

KEEP OUT OF REACH OF CHILDREN.

TOXIC TO AQUATIC ORGANISMS Do not contaminate surface waters or ditches with chemical or used container.

KEEP IN ORIGINAL CONTAINER, tightly closed in a safe place, EMPTY CONTAINER COMPLETELY and dispose of safely.

16.

OTHER INFORMATION

The information contained within this Material Safety Data Sheet does not constitute the users own assessment of workplace risk as required by other national health and safety legislation such as the Health and Safety at Work Act (1974) and the Control of Substances Hazardous to Health Regulations (1988).

Date of MSDS Review : 07.07.04 Supersedes MSDS Dated : 1.11.03

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