TRIBUTE PLUS

1. Preparation	IDENTIFICATION : TRIBUTE PLUS				
Supplier	: Nomix Enviro Ltd, Portland Buildings, Portland Street, Staple Hill, Bristol BS Tel. 0117 9574 574 Fax. 0117 956				
Chemical Emergency Agency Service (24 hr): Tel. 01865 407 333					
2.COMPOSITION/INFORMATION ONINGREDIENTS Composition:Potassium/sodium salts of 4-chloro-o-tolyloxy acetic acid (252 g/l MCPA-active acid) (CAS NO. 94-74-6)26.2%Potassium salt of (R)- 2-(4-chloro-o-tolyloxy) propionic acid (42 g/l mecoprop-p active acid) (CAS NO. 7085-19-0)4.8%					
Sodium salt of 3,6-dichloro-o- (CAS NO. 1982-69-0)	-anisic acid (18 g/l Dicamba active acid)	1.9%			
Inert ingredients		to 100%			
Registration No:	09493				

3.

HAZARDS 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.

Environmental effects:

On the basis of available information, this material is not expected to produce any significant adverse environmental effects when recommended use instructions are followed. It is considered harmful to fish or aquatic life.

4. Inhalation:

FIRST-AID MEASURES

Remove patient to fresh air. If breathing is difficult give oxygen. Obtain medical attention.

Skin contact:

Take off immediately all contaminated clothing. If spilled into boots immediately remove boots and contaminated clothing. Wash skin immediately with plenty of water and soap if available.

Eye Contact:

Irrigate immediately with plenty of clean water for 10-15 minutes. If irritation persists obtain medical attention.

TRIBUTE PLUS

Ingestion:

May cause nausea. Do not induce vomiting. Obtain medical attention immediately.

Further Medical Advice:

Over exposure symptoms: no symptoms diagnostic of systemic poisoning with this product. No specific antidote. Treat symptomatically.

5.

FIREFIGHTING RELEASE MEASURES

Not applicable. Non flammable product.

Procedure:

Flammability:

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

Fire Fighting Protective Equipment:

Keep containers cool by spraying with water if exposed to fire. Extinguish preferably with foam (alcohol foam), dry chemical, CO_2 or water spray. DO NOT use soda or alkaline powder. Use as little water as possible. Dyke the area 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 bags or other means to prevent entry into drains.

Methods of 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

Good industrial practice in housekeeping and personal hygiene should be followed. Do not breathe 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 the reach of children. Keep away from food, drink and animal feeding stuffs.

Keep only in the original container. Keep container tightly closed. Store above 0° C. Keep at temperature not exceeding 40° C

Storage Life: Minimum shelf life: 2 years

TRIBUTE PLUS

8. EXPOSURE CONTROLS / PERSONAL PROTECTION Occupational exposure limits: None assigned

Engineering measures:

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

Respiratory Protection:

No special requirement when used as recommended. If exposed to vapour or spray, wear suitable respiratory protective device.

Hand Protection:

Wear impermeable gloves.

Eye protection:

No special requirement when used as recommended.

Skin Protection:

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

9.	PHYSICAL AND CHEMICAL PROPERTIES
Appearance:	liquid
Colour:	dark coloured
Flash point:	$> 100^{\circ}$ C. Non flammable
Specific gravity:	1.15at 20º C
Solubility in water:	Completely miscible
10	

10. Conditions to avoid: None known

STABILITY AND REACTIVITY

Hazardous decomposition products:

Contact with strong alkalis and will release amines which are toxic and flammable. Over-heating and combustion leads to oxides of nitrogen, hydrogen chloride, carbon monoxide and carbon dioxide will be given off.

11. TOXICOLOGICAL INFORMATION

Laboratory:

The toxicological information given here is not necessarily exhaustive but is representative of relevant, reliable data. All tests were conducted following OECD guidelines for Good Laboratory Practice (GLP).

Active Ingredients:

<u>MCPA</u>:

Acute oral LD_{50} (rat) = 700 mg/kg Acute dermal LD_{50} (rat) = >1 000 mg/kg

TRIBUTE PLUS

Page 4 of 4

Mecoprop-p:

Acute oral LD_{50} (rat) = 1050 mg/kg. Acute dermal LD_{50} (rat) = > 4 000 mg/kg Inhalation LC_{50} (4hr)(rat) = > 5.6 mg/l

Dicamba:

Acute oral LD_{50} (rat) = 1 700 mg/kg Acute dermal LD_{50} (rat) - > 2 000 mg/kg Inhalation LC_{50} (4hr) (rat) = 200 mg/l

Human data:

If swallowed, may cause gastrointestinal tract irritation (discomfort, nausea, vomiting, diarrhoea).

MCPA :

Shows moderate oral toxicity and is classified as an eye irritant. Cases of dermatitis have been reported and there is some evidence that some workers may be allergic to the chemical through pains, nausea, itching and burning of the skin.

Dicamba:

Slightly irritating to rabbit skin. Does not exhibit any carcinogenic, teratogenic or other reproductive effects with the exception of slightly reduced foetal body weights in animal tests. Data suggests that Dicamba is not a mutagen.

12. ECOLOGICAL INFORMATION

Assessment:

Harmful to aquatic organisms.

Aquatic Toxicity:

MCPA:	
LC ₅₀ (48hr)	Bluegill sunfish 100ppm
LC ₅₀ (24hr)	Bluegill sunfish 1.5 mg/l
LC ₅₀ (24hr)	Rainbow trout 117 mg/l

Dicamba:

LC ₅₀ (48hr)	Bluegill sunfish 20 mg/l
LC ₅₀ (48hr)	Daphnia magna 110.7 mg/l

13. DISPOSAL CONSIDERATIONS

Product:

Send to special chemical waste disposal facility or burn only in special, controlled high temperature incinerator. As far as possible recover and store any remaining product in original package of the same product.

Container:

TRIBUTE PLUS

Dispose of container through a reputable waste disposal contractor. Do not contaminate waterways, ponds or ditches with waste product or container. All local and national regulations should be followed.

14. TRANSPORT INFORMATION

ADR Class/Conveyance class:	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. The following risk and safety phrases have been assigned by the Pesticide Safety Directorate of the Ministry of Agriculture, Fisheries and Food.

Risk Phrases:	
----------------------	--

R36 Harmful in contact with skin

R21 Irritating to eyes.

R52 Harmful to aquatic organisms.

Safety Phrases:

WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS), SUITABLE PROTECTIVE GLOVES AND FACE PROTECTION (FACESHIELD) when handling the concentrate. WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS) when applying by vehicle mounted equipment.

WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS), SUITABLE PROTECTIVE GLOVES AND FACE PROTECTION (FACE SHIELD) when handling contaminated surfaces and applying by hand-held equipment.

WASH CONCENTRATE from skin or eyes immediately.

WASH HAND AND EXPOSED SKIN before meals and after work.

WHEN USING DO NOT EAT, DRINK, OR SMOKE.

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

KEEP LIVESTOCK OUT of treated areas for at least two weeks following treatment and until poisonous weeds such as ragwort have died and become unpalatable.

DO NOT RE-USE CONTAINER for any purpose. KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDING STUFFS. KEEP OUT OF REACH OF CHILDREN. KEEP IN ORIGINAL CONTAINER, tightly closed, in a safe place. WASH OUT CONTAINER THOROUGHLY 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

TRIBUTE PLUS

Page 6 of 6

safety legislation such as the Health and Safety at Work Act (1974) and the Control of Substances Hazardous to Health Regulations (1988).

Read the label before you buy: Use pesticides safely.

Date of MSDS Preparation: 13.07.04 Supersedes MSDS Dated : 5.11.03

The information in this data sheet is to the best of our knowledge true and accurate, but all instructions, recommendations and suggestions are made without guarantee. Since the conditions of use are beyond their control, Nomix Enviro and its subsidiaries disclaim any liability for loss or damage suffered from use of this information. Furthermore no liability is accepted if use of any product in accordance with these instructions, recommendations and suggestions infringes any patent.

ã Nomix Enviro Limited 2004