

SAFETY DATA SHEET

14/2/01

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Dow AgroSciences Limited
Latchmore Court
Brand Street
Hitchin
Herts SG5 1NH

Emergency Telephone Number: UK: 0870 600 2999
Eire: 01 821 4999

Poisons Information Centre: UK: 0121 507 5588/5589
Eire: 01 837 9964/66

Product Name: **VINDEX* HERBICIDE : MAFF 05470**

LV70: 26422 Issue Date: April 95
Revised: Feb. 01 (Section(s) 1, 3, 13 & 15)

Ref: C0211

2. COMPOSITION/INFORMATION ON INGREDIENTS

Components contributing to hazard:

		CAS	EINECS
Clopyralid	50 g/L	001702-17-6	216-935-4
Bromoxynil octanoate	350 g/L	001689-99-2	216-885-3
Solvents (including cyclohexanone) plus inert ingredients	Balance		

Composition Code EF1106

3. HAZARDS IDENTIFICATION

Harmful in contact with skin and if swallowed.
May cause lung damage if swallowed.
Irritating to eyes and skin.
Flammable.
Harmful to aquatic organisms.
Harmful to bees.

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SAFETY DATA SHEET

14/2/01

VINDEX* HERBICIDE : MAFF 05470

4. FIRST-AID MEASURES

Never give fluids or induce vomiting if patient is unconscious or is having convulsions.

Ingestion

Do not induce vomiting. Call a physician and/or transport to emergency facility immediately. The decision of whether to induce vomiting or not should be made by an attending physician.

Eye Contact

Wash eyes immediately and continuously for 30 minutes. Seek medical attention immediately. Wash eyes enroute if possible.

Skin Contact

Remove contaminated clothing immediately, wash skin area with soap and water, and launder clothing before reuse. Consult a physician.

Inhalation

Remove to fresh air. Consult a physician.

Note to Physician

Likely symptoms of ingestion are nausea, vomiting, and diarrhoea. Signs of poisoning may include: Raised temperature. Increased respiratory rate. Sweating. Excitability. Other non-specific effects.

If lavage is performed, suggest endotracheal and/or oesophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. Supportive care. Treatment based on judgement of physician in response to symptoms of patient.

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Water fog or fine spray. Carbon dioxide. Dry chemical. Foam.

Hazardous Combustion Products

During a fire, smoke may contain the original material in addition to unidentified toxic and/or irritating compounds.

Protection of Firefighters

Wear protective clothing and use self-contained breathing apparatus.

Additional Information

Keep containers cool by spraying with water. Contain runoff to prevent entry into water or drainage systems.

SAFETY DATA SHEET

14/2/01

VINDEX* HERBICIDE : MAFF 05470

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions

Wear appropriate safety clothing and eye/face protection (see Section 8).

Environmental Precautions

Do not wash into sewers or into any body of water. Advise water authority if spillage has entered water course or drainage system.

Methods of Cleaning Up

Soak up with sand or other non-combustible absorbent material and place into containers for disposal. For large spills, barricade area and consult manufacturer. If further assistance is required, telephone the emergency contact number.

7. HANDLING AND STORAGE

Handling

Use good personal hygiene. Do not consume or store food in the work area. Wash hands and exposed skin before eating, drinking or smoking and after work. Avoid eye and skin contact.

Storage

Product should be stored in compliance with local regulations. Store in a cool, dry, well-ventilated place in the original container. Protect from excessive heat and cold. Do not store near food, drink, animal feeding stuffs, pharmaceuticals, cosmetics or fertilisers. Keep out of reach of children.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Clopyralid: Dow AgroSciences IHG is 10 mg/m³.

Solvent: ACGIH Threshold Limit Value (TLV) is 100 mg/m³ TWA-8 hours (skin).

Engineering Controls

Good general ventilation should be sufficient for most conditions. Local exhaust ventilation may be necessary for some operations.

Respiratory Protection

For most conditions, no respiratory protection should be needed. However, when airborne exposure guidelines and/or comfort levels may be exceeded use an approved air-purifying respirator. For emergency conditions, use an approved positive-pressure self-contained breathing apparatus.

SAFETY DATA SHEET

14/2/01

VINDEX* HERBICIDE : MAFF 05470

Hand/Skin Protection

Prevent skin contact. Use protective clothing impervious to this material. Selection of specific items will depend on operation.

Eye/Face Protection

Use chemical goggles.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: liquid
Colour	: brown
Rel. density (water=1)	: 1.08 (20 deg.C) (approx.)
Water solubility	: emulsifiable
Flash point	: 61 deg.C (PMCC)

10. STABILITY AND REACTIVITY**Chemical Stability**

Is stable under normal storage conditions.

Conditions to Avoid

Avoid high temperatures (at or near flash point), open flame, sparks and direct sunlight.

Materials to Avoid

Strong basic, acidic or oxidising materials.

Hazardous Decomposition Products

None under normal conditions of storage and use.

Additional Information

Contains petroleum derivative solvent - will burn.

11. TOXICOLOGICAL INFORMATION**Acute toxicity**

Assessment largely or completely based on information about the major ingredient(s).

Ingestion

Single dose oral toxicity is considered to be moderate.
The estimated oral LD50 for rats is >500mg/kg, <2000mg/kg.

Skin Contact

The estimated dermal LD50 for rats is <2000 mg/kg.
A single prolonged exposure may result in the material being absorbed in harmful amounts.
Short single exposure may cause skin irritation.

SAFETY DATA SHEET

14/2/01

VINDEX* HERBICIDE : MAFF 05470

Sensitisation

Bromoxynil Octanoate: Known or suspected skin sensitiser.

Eye Contact

May cause moderate and prolonged irritation with corneal injury.

Inhalation

No adverse effects anticipated by this route of exposure, but excessive exposure should be avoided. Excessive exposure may cause irritation to upper respiratory tract (nose and throat).

12. ECOLOGICAL INFORMATION

Assessment largely or completely based on data for active ingredient.

Persistence and Degradability

Clopyralid:

The principle route of degradation is microbial and will occur readily. Half-life in soils is dependent on soil type and conditions and is approximately 12-62 days.

Aquatic Toxicity

Clopyralid:

Material is not harmful to fish on an acute basis (LC50>100mg/L).
Material is not harmful to aquatic invertebrates on an acute basis (EC50>100mg/L).

Bromoxynil Octanoate:

Material is very highly toxic to fish on an acute basis (LC50 <0.1mg/L).

Avian Toxicity

Clopyralid:

Material is slightly toxic to birds on an acute basis (500mg/kg <LD50 <2000mg/kg).

Bromoxynil Octanoate:

Acute toxicity varies according to species 170->2000mg/kg.

13. DISPOSAL CONSIDERATIONS

Harmful to aquatic organisms. Do not contaminate ponds, waterways or ditches with chemical or used container. Wash out thoroughly. Container and washings must be disposed of safely and in accordance with applicable regulations. The preferred options are to send to licensed reclaimer or to permitted incinerators. Do not re-use container for any purpose.

SAFETY DATA SHEET

14/2/01

VINDEX* HERBICIDE : MAFF 05470

14. TRANSPORT INFORMATION**Road, Rail & Barge**

Proper shipping name: 1993,FLAMMABLE LIQUID,N.O.S.(Contains Cyclohexanone)

Truck - ADR Loaded	: 3-31c	Empty	: 3-71	Label	: 3
Rail - RID Loaded	: 3-31c	Empty	: 3-71	Label	: 3
		Filling %		Packed	:
		Filling %		Bulk	:
		Filling Kg/L		(Gas)	:
Kemler Code	: 30	UN Number			: 1993
Tremcard Nr. CEFIC	: 30G35				
Tremcard Nr. Other	:				
Barge - ADNR Loaded	: 3-31c	Empty	: 3-71	Label:	3
Ship Type	:	CATG.	:		

Sea

Proper shipping name: FLAMMABLE LIQUID,N.O.S.(Contains Cyclohexanone and Bromoxynil 32.4% W/W)

Sea - IMO/IMDG Class:	3.3	UN Nr	: 1993	Label:	3
Packing Group	: III	EMS	: 3-07	MFAG	: 311
Container Type	:	Marine Pollutant			: Y (Y/N)
Test Pressure (bar)	:	Filling %		Packed	:
		Filling %		Bulk	:
		Filling Kg/L		(Gas)	:

Air

Proper shipping name: FLAMMABLE LIQUID, N.O.S. (Contains Cyclohexanone)

Air-ICAO/IATA Class	: 3	UN Nr	: 1993	Label:	3
Sub Class	:				
Packing Group	: III	Pack Instr. Passenger			: 309
		Pack Instr. Cargo			: 310

Remarks : Sample shipment not allowed by mail.

15. REGULATORY INFORMATION

Hazard Symbol : Xn - Harmful

Risk Phrases : Harmful in contact with skin and if swallowed. (R21/22)
 Harmful: may cause lung damage if swallowed. (R65)
 Irritating to eyes and skin. (R36/38)
 Flammable. (R10)

SAFETY DATA SHEET

14/2/01

VINDEX* HERBICIDE : MAFF 05470

Safety Phrases : Keep out of reach of children. (S2)
Keep away from food, drink and animal feeding stuffs.
(S13)
When using do not eat, drink or smoke. (S20/21)
Do not breathe spray. (S23)
Avoid contact with skin and eyes. (S24/25)
In case of contact with eyes, rinse immediately with
plenty of water and seek medical advice. (S26)
Wear suitable gloves and eye/face protection. (S37/39)
If you feel unwell, seek medical advice (Show the
label where possible). (S44)
If swallowed, do not induce vomiting: seek medical
advice immediately and show this container or label.
(S62)

16. OTHER INFORMATION

The information herein is given in good faith and to the best of our knowledge but no warranty, express or implied, is made.