

SAFETY DATA SHEET

9/3/04

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

Product Name: **TIMBREL* HERBICIDE : MAFF 05815 (PCS 91423)**

LV70: 30184

Issue Date: Nov. 94

Ref: H851V

Revised: March 04 (Section(s) 2-5, 8, 9, 11-13, 15 & 16)

2. COMPOSITION/INFORMATION ON INGREDIENTS**Dangerous components (see section 16 for complete R-phrases):**

			CAS	EC No
Triclopyr-2-butoxyethyl ester	61-62 %	Xn,N; R22-43-50/53	064700-56-7	265-024-8
Surfactant	<5 %	Xi; R38-41		
Kerosene (petroleum)	20-40 %	Xn; R65, R66, N;R51/53, R10	008008-20-6	232-366-4
Inert ingredients	Balance			

3. HAZARDS IDENTIFICATION

Harmful if swallowed. Irritating to skin. May cause sensitization by skin contact. Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment. Harmful: may cause lung damage if swallowed.

* TIMBREL Trademark of Dow AgroSciences

SAFETY DATA SHEET

9/3/04

TIMBREL* HERBICIDE : MAFF 05815 (PCS 91423)

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 a physician.

Eye Contact

Flush eyes thoroughly with water for several minutes. Remove contact lenses after initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist.

Skin Contact

Immediately wash skin with soap and plenty of water. Remove contaminated clothing. Wash contaminated clothing before reuse.

Inhalation

Remove to fresh air. Consult a physician.

Note to Physician

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 powder. Foam.

Hazardous Combustion Products

During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating.

Combustion products include: Nitrogen oxides. Hydrogen chloride. Phosgene. Dependent on the intensity of the fire.

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. Avoid breathing smoke. Work upwind of any spill.

SAFETY DATA SHEET

9/3/04

TIMBREL* HERBICIDE : MAFF 05815 (PCS 91423)

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

Triclopyr: Dow AgroSciences IHG is 2 mg/m³ (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

9/3/04

TIMBREL* HERBICIDE : MAFF 05815 (PCS 91423)

Hand/Skin Protection

For brief contact, no precautions other than clean body-covering clothing and chemical resistant gloves should be needed. Use chemical resistant gloves classified under standard EN 374: Protective gloves against chemicals and micro-organisms. Examples of preferred glove barrier materials include: Nitrile. Polyvinyl chloride ("PVC" or "vinyl"). Neoprene. Avoid gloves made of: Natural rubber ("latex").

When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to EN 374) is recommended. When only brief contact is expected, a glove with a protection class of 3 or higher (breakthrough time greater than 60 minutes according to EN 374) is recommended. When prolonged or frequently repeated contact could occur, use protective clothing impervious to this material. For emergency conditions: Use protective clothing impervious to this material. Selection of specific items will depend on operation.

Eye/Face Protection

Use safety glasses. Where contact with the liquid is likely, chemical goggles are recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: liquid
Colour	: amber
Rel. density (water=1)	: 1.08 g/cm ³ (approx.)
Water solubility	: emulsifiable
Flash point	: 65 deg.C Closed cup
Auto-ignition temp.	: 238 deg.C
Explosive properties	: not explosive
Viscosity	: 6.32 cSt (40 deg.C)
Flammability	: not flammable
Surface tension	: 27 mN/m (25 deg.C)
pH typical range	: 5-6

10. STABILITY AND REACTIVITY**Chemical Stability**

Is stable under normal storage conditions.

Conditions to Avoid

Avoid extremes of temperature. Closed containers may explode due to pressure build-up when subjected to excessive heat or intense fire.

Materials to Avoid

Strong basic, acidic or oxidising materials.

Hazardous Decomposition Products

None under normal conditions of storage and use.

SAFETY DATA SHEET

9/3/04

TIMBREL* HERBICIDE : MAFF 05815 (PCS 91423)

11. TOXICOLOGICAL INFORMATION

Ingestion

Moderate toxicity if swallowed. The oral LD50 for rats is 1100 mg/kg.

Skin Contact

The dermal LD50 for rats is >2000mg/kg. Prolonged skin contact is unlikely to result in absorption of harmful amounts. Short single exposure may cause skin irritation.

Sensitisation

Sensitising to guinea pig skin.

Eye Contact

May cause slight eye irritation.

Inhalation

The LC50 for inhalation in rats is >5.2 mg/L. No adverse effects anticipated by this route of exposure incidental to proper handling.

Additional Information

Not carcinogenic. Not mutagenic. Not toxic for reproduction.

12. ECOLOGICAL INFORMATION

Persistence and Degradability

Assessment largely or completely based on data for active ingredient. Rapidly hydrolysed in soil and water (with a half-life of less than 1 day) to the parent acid, which undergoes further degradation. Half-life of the parent acid in soil and water is dependent on conditions and is approximately 6-52 days.

Aquatic Toxicity

Material is very toxic to fish on an acute basis (LC50<1mg/L).
Material is very toxic to aquatic invertebrates on an acute basis (EC50<1mg/L).
Material is harmful to algae (10mg/l< IC50 <100mg/l).

Avian Toxicity

Material is practically non-toxic to birds on an acute basis (LD50 >2000mg/kg).

Other Information

Non-toxic to bees.

SAFETY DATA SHEET

9/3/04

TIMBREL* HERBICIDE : MAFF 05815 (PCS 91423)

13. DISPOSAL CONSIDERATIONS

Very toxic 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.

14. TRANSPORT INFORMATION

Road & Rail

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
N.O.S.(Triclopyr)
Truck/Rail ADR/RID : 9 Label : < >
Classification Code : M6
Packing Group : III
Kemler Code : 90 UN Number : 3082
Tremcard Nr. CEFIC : 90GM6-III

Sea

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
N.O.S.(Triclopyr)
Sea - IMO/IMDG Class: 9 UN Nr : 3082 Label: 9
Packing Group : III EMS : -
Marine Pollutant : Y (Y/N)

Air

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
N.O.S.(Triclopyr)
Air-ICAO/IATA Class : 9 UN Nr : 3082 Label: 9
Sub Class :
Packing Group : III Pack Instr. Passenger : 914
Pack Instr. Cargo : 914

Remarks : Sample shipment not allowed by mail.

15. REGULATORY INFORMATION

Hazard Symbol : Xn - Harmful
N - Dangerous for the Environment

Risk Phrases : Harmful if swallowed (R22).
Irritating to skin (R38).
May cause sensitisation by skin contact (R43).
Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment (R50/53).
Harmful: may cause lung damage if swallowed (R65).

SAFETY DATA SHEET

9/3/04

TIMBREL* HERBICIDE : MAFF 05815 (PCS 91423)

Safety Phrases : Avoid contact with skin (S24).
This material and its container must be disposed of
in a safe way (S35).
Wear suitable gloves (S37).
Use appropriate containment to avoid environmental
contamination (S57).
If swallowed, do not induce vomiting: seek medical
advice immediately and show this container or label
(S62).

Refer to the Product Label for full Local Regulatory Authority label
precautions.

16. OTHER INFORMATION

Risk-phrases in Section 2

R10 - Flammable.
R22 - Harmful if swallowed.
R38 - Irritating to skin.
R41 - Risk of serious damage to eyes.
R43 - May cause sensitisation by skin contact.
R50/53 - Very toxic to aquatic organisms, may cause long-term adverse
effects in the aquatic environment.
R51/53 - Toxic to aquatic organisms, may cause long-term adverse
effects in the aquatic environment.
R65 - Harmful: may cause lung damage if swallowed.
R66 - Repeated exposure may cause skin dryness or cracking.

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