



MATERIAL SAFETY DATA SHEET

4/2/14

1. PRODUCT AND COMPANY IDENTIFICATION

Supplier DOW AGROSCIENCES (PTY) LTD
Private Bag X160,
Bryanston,
2021.

EMERGENCY TELEPHONE NUMBERS

SPILLAGES:

Emergency telephone (+27) 32 5330716 or 082 887 8079
Fax (+27) 32 5336134

POISONINGS:

National Poison Centre 021-9386084 (office hours).
021-9316129 (after hours).

UOFS Pharmacology/Toxicology information centre:
082 491 0160

Product Name: **TIMBREL* 360 SL HERBICIDE**

LV70: 46079

Issue Date: Dec. 93

Ref: G8V13

Revised: March 2010

2. COMPOSITION/INFORMATION ON INGREDIENTS

Components contributing to hazard:

		CAS	EINECS
Triclopyr	360 g/l	057213-69-1	260-625-1
triethylamine salt			
Inert ingredients	Balance		

NIOSH/RTECS no:
UN no: 1993

3. HAZARDS IDENTIFICATION

Flammable. Harmful if swallowed. May cause severe irritation with corneal injury, which may result in permanent impairment of vision, even blindness. May cause sensitization by skin contact.

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.

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PAGE 2 OF 6

MATERIAL SAFETY DATA SHEET

4/2/14

TIMBREL* 360 SL HERBICIDE

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

No specific antidote. May cause tissue destruction leading to stricture. Supportive care. Treatment based on judgement of physician in response to symptoms of patient.

5. FIRE-FIGHTING MEASURES

Toxic, irritating vapors may be formed or given off if product is involved in fire. Although product is water-based, it has a flash point due to the presence of small amounts of ethanol and triethylamine.

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.

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.

Additional Information

Eliminate all ignition sources.

MATERIAL SAFETY DATA SHEET

4/2/14

TIMBREL* 360 SL HERBICIDE

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 4 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

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.

Hand/Skin Protection

For brief contact, no precautions other than clean body-covering clothing and impervious gloves should be needed. 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 chemical goggles.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: liquid
Odour	: ammonia-like
Colour	: light purple/pink
Rel. density (water=1)	: 1.14 g/cm ³ (approx.)
Water solubility	: soluble
Flash point	: 43 deg.C (TCC)
pH (neat)	: 8,7 - 9,7

MATERIAL SAFETY DATA SHEET

4/2/14

TIMBREL* 360 SL HERBICIDE

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.

11. TOXICOLOGICAL INFORMATION**Ingestion**

Single dose oral toxicity is considered to be low to moderate.

The oral LD50 for female rats is 1847 mg/kg.

The oral LD50 for male rats is 2574 mg/kg.

Skin Contact

The dermal LD50 for rabbits is >5000mg/kg.

A single prolonged exposure is not likely to result in the material being absorbed through skin in harmful amounts.

Essentially non-irritating to skin but prolonged or repeated exposure may cause skin irritation or even a burn.

Sensitisation

Known or suspected skin sensitiser.

Eye Contact

May cause severe irritation with corneal injury, which may result in permanent impairment of vision, even blindness.

Inhalation

A single brief (minutes) inhalation exposure is not likely to cause adverse effects.

12. ECOLOGICAL INFORMATION**Persistence and Degradability**

Degradation is microbially mediated and occurs readily, dependent on conditions.

Bioconcentration potential is low (BCF <100 or Log Pow <3).

Aquatic Toxicity

Material is practically non-toxic to fish on an acute basis (LC50 >100 mg/L). Acute LC50 for rainbow trout (*Oncorhynchus mykiss*) is 400 mg/L.

Material is slightly-toxic to aquatic invertebrates on an acute basis (LC50 50-100 mg/L). Acute EC50 for shell deposition inhibition in Eastern oyster (*Crassostrea virginica*) is 56-87 mg/L.

MATERIAL SAFETY DATA SHEET

4/2/14

TIMBREL* 360 SL HERBICIDE

Avian Toxicity

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

Algae Toxicity

Slightly toxic to algae. Growth inhibition EC₅₀ for green alga (*Selenastrum capricornutum*) is 45 mg/L.

13. DISPOSAL CONSIDERATIONS

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

UN no.: 1993

ADR

Proper shipping name: Flammable, liquid, n.o.s. (Contains Ethanol water mixture)

Class: 3

Classification code: F1

Packaging group: III

Label: 3

Hazard ID no.: 30

IMO/IMDG

Proper shipping name: Flammable, liquid, n.o.s. (Contains Ethanol water mixture)

Class: 3

Label: 3

Packing Group: III

ICAO/IATA

Proper shipping name: Flammable, liquid, n.o.s. (Contains Ethanol water mixture)

Class: 3

Label: 3

Packing Group: III

Pack Instr. Passenger: 309

Pack Instr. Cargo: 310

Tremcard Nr. CEFIC: 30GF1-III

Remarks: Sample shipment not allowed by mail.

MATERIAL SAFETY DATA SHEET

4/2/14

TIMBREL* 360 SL HERBICIDE

15. REGULATORY INFORMATION**Hazard Symbol :** Xn - Harmful**Risk Phrases :** Flammable. (R10)
Harmful if swallowed. (R22)
Irritating to eyes. (R36)
May cause sensitisation by skin contact. (R43)**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)
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)
In case of accident or if you feel unwell, seek medical advice immediately (Show the label where possible). (S45)
Wear suitable protective clothing, gloves and eye/face protection. (S36/37/39)**National Legislation:**

In accordance with the South African National Road Traffic Act, 1996 (Act 93 of 1996), the Fire Brigade Act, 1987 (Act 99 of 1987) and the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993).

16. OTHER INFORMATION**REFERENCES**

- Applicable to own physical and chemical, toxicity and ecotoxicity research studies.
- *The Pesticide Manual*; Eleventh Edition; Editor Clive Tomlin; Crop Protection Publications, 2003.
- SABS 0265: 1999
- *Dangerous Goods Regulations; IATA 2006*; International Air Transport Association, 47th Edition, Effective 1 January 2006.
- *IMDG CODE, Vol. 2, 2005 Edition*.
- ADR, Vo. 11, 2005
- EXTOXNET, Pesticide Information Profile, 03/11/98,
- SABS

All information and instructions provided in this Material Safety Data Sheet (MSDS) are based on the current state of scientific and technical knowledge at the date indicated on the present MSDS and are presented in good faith believed to be correct. This information applies to the PRODUCT AS SUCH. In case of formulations or mixes, it is necessary to ascertain that a new danger will not appear. It is the responsibility of persons in receipt of this MSDS to ensure that the information contained herein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. If the recipient subsequently produces formulation(s) containing this product, it is the recipient's sole responsibility to ensure the transfer of all relevant information from this MSDS to their own MSDS.

END OF MSDS .