



## MATERIAL SAFETY DATA SHEET

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Trade Name:** Timbrel  
**Approved Use:** Herbicide  
**Supplier:** Barclay Chemicals Manufacturing Ltd.,  
Damastown Way  
Damastown Industrial Park  
Mulhuddart  
Dublin 15  
Ireland.  
**Telephone No:** 00-353-1-8112900  
**Fax No:** 00-353-1-822 4678

**EMERGENCY TELEPHONE NUMBER: 00-353-1-8112900 (9am to 5pm)**  
**00-353-863857769 (5pm to 9am)**

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

No.	Name				
1.	Triclopyr-2-butoxyethyl ester				
2.	Surfactant				
3.	Kerosene (petroleum)				

  

No.	CAS No.	EC No.	R Phrases	Concentration	Classification
1.	064700-56-7	265-024-8	R22,R43,R50/53	61-62%	Xn N
2.	-----	-----	R38,R41	<5%	Xi
3.	008008-20-6	232-366-4	R65,R66,R51/53,R10	20-40%	Xn,N

**Legend:** Tx = Very Toxic, C = Corrosive, Xn = Harmful, Xi = Irritant, Ik = No Classification Required, E = Explosive, O = Oxidising, Fx = Extremely Flammable, F = Very Flammable, Fo = Flammable, N = Dang. To the Environment, M = Genotoxic, A = Sensitizing, K = Carcinogenic, R = Causes birth defects, H = skin absorption



### 3. HAZARDS IDENTIFICATION

**Human:** Harmful if swallowed. Irritating to skin. May cause sensitization by skin contact. May cause lung damage if swallowed.

**Environmental:** Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

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### 4. FIRST-AID MEASURES

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

**Inhalation:** Remove to fresh air. Consult a physician.

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

**Eye Contact:** May cause slight eye irritation.

**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.

**Medical Information:** **Note to Doctor:** 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.

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### 5. FIRE-FIGHTING MEASURES

**Suitable 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.

**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.

**Protective Equipment:** Wear protective clothing and use self-contained breathing apparatus.

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## 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions:</b>	Wear appropriate safety clothing and eye/face protection (see Section 8).
<b>Environmental Precautions:</b>	Do not wash into sewers or into any body of water. Advise water authority if spillage has entered water course or drainage system.
<b>Methods for Cleaning Up:</b>	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

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## 7. HANDLING AND STORAGE

<b>Handling:</b>	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.
<b>Storage:</b>	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.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<b>Respiratory Protection:</b>	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
<b>Hand/Skin protection:</b>	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

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**Eye/ Face Protection:**

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

**Engineering controls**

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

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Liquid
<b>Colour:</b>	Amber
<b>Rel density (water = 1):</b>	1.08 g/cm <sup>3</sup>
<b>Water solubility:</b>	emulsifiable
<b>Flash point:</b>	65 ° C Closed cup
<b>Auto ignition temp:</b>	238 °C
<b>Explosive Properties:</b>	Not explosive
<b>Viscosity:</b>	6.32 cSt (40°C)
<b>Surface Tension:</b>	27 Mn/M (25° C)
<b>Ph typical range:</b>	5-6

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## 10. STABILITY AND REACTIVITY

<b>Chemical Stability:</b>	Is stable under normal storage conditions.
<b>Conditions to Avoid:</b>	Avoid Extremes of temperature. Closed containers may explode due to pressure build-up when subjected to excessive heat or intense fire.
<b>Materials to Avoid:</b>	Strong basic, acidic or oxidizing materials
<b>Hazardous Decomposition Products:</b>	None under normal conditions of storage and use.

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## 11. TOXICOLOGICAL INFORMATION

<b>Ingestion:</b>	Moderate toxicity if swallowed. The oral LD50 for rats is 1100 mg/kg.
<b>Skin Contact:</b>	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.
<b>Sensitisation:</b>	Sensitising to guinea pig skin
<b>Eye Contact:</b>	May cause slight eye irritation.
<b>Inhalation:</b>	The LC50 for inhalation in rats is >5.2 mg/L. No adverse effects anticipated by this route of exposure incidental to proper handling.
<b>Carcinogenicity:</b>	Not carcinogenic.
<b>Mutagenicity:</b>	Not mutagenic.
<b>Developmental/Reproductive Effects:</b>	Not toxic for reproduction.

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## 12. ECOLOGICAL INFORMATION

<b>Aquatic Toxicity:</b>	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).
<b>Persistence and Degradability:</b>	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.
<b>Avian Toxicity:</b>	Material is practically non-toxic to birds on an acute basis (LD50 >2000mg/kg).
<b>Other Information:</b>	Non-Toxic to bees.

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## 13. DISPOSAL CONSIDERATIONS

<b>Product and Waste:</b>	Very toxic to aquatic organisms. Do not contaminate ponds, waterways or ditches with chemical or used container.
<b>Containers:</b>	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.

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## 14. TRANSPORT INFORMATION

<b>Special Transport Precautions:</b>	UN 3082, PG III
<b>Road/Rail Classification:</b>	ADR/RID Class: 9 Haz ID: 90 Classification code: M6 Proper shipping name: Environmentally hazardous substance, liquid, N.O.S. (Triclopyr)
<b>Sea Classification:</b>	IMDG Class: 9 Proper shipping name: Environmentally hazardous substance, liquid, N.O.S. (Triclopyr)
<b>Air Classification:</b>	ICAO/IATA Class: 9 Proper shipping name: Environmentally hazardous substance, liquid, N.O.S. (Triclopyr)

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## 15. REGULATORY INFORMATION

**Xn**

**N**

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

### R- PHRASES:

- R22** - Harmful if swallowed
- R38** - Irritating to skin
- R43** - May cause sensitization by skin contact.
- R50/53** - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic Environment
- R65** - May cause lung damage if swallowed.

### S- PHRASES

- S24** - Avoid contact with skin
- S35** - This material and it's container must be disposed off in a safe way.
- S37** - Wear suitable gloves.
- S57** - Use appropriate containment to avoid environmental contamination
- S62** - If swallowed, don not induce vomiting: seek medical advice immediately and show this Container or label.

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

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## 16. OTHER INFORMATION

Revision 0 Date Prepared: 04/10/06  
Revision 1 Date Prepared: 11/12/06 Emergency phone number updated

### DISCLAIMER

*The information in the MSDS relates to this specific material. If the product is used as a component in any other product, this MSDS may not be valid. The information contained was obtained from sources which we believe are reliable. The information is provided without any warranty, expressed or implied, regarding its correctness.*

*This Material Safety Data Sheet was prepared according to Directive 2001/58/EC.*

