

MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Trade Name: Barclay Hurler 200
Chemical Name: Fluroxypyr-Methyl [4-amino-3,5-dichloro-6-fluro-2-pyridloxyacetic acid (IUPAC)]
Group Name: Pyridine
Formula: C₇ H₁₅Cl₂FN₂O₃. [RMM = 255.0]
Approved Use: Control of broad-leaved weeds in cereals and grass.
Supplier: Barclay Chemicals Manufacturing Ltd.,
Damastown Way
Damastown Industrial Park
Mulhuddart
Dublin 15
Ireland
Telephone No: 00 353 1 811 2900
Fax No: 00 353 1 822 4678
Issued By: Barclay Chemicals Ltd.

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

2. COMPOSITION/INFORMATION ON INGREDIENTS

No.	Name
1.	Fluroxypyr 1-methylheptyl ester.
2.	Petroleum solvent
3.	Surfactant

No.	CAS No.	R Phrases	Concentration	Classification
1.	81406-37-3	R53	30.0% w/w	IK
2.	64742-94-5	R10,R37,R51/53,R65,R66,R67	Classified	Xn,N
3.	-	R10,R37/38,R41,R52/53,R67	Classified	Xi

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

Flammable

Human:

Irritating to skin and respiratory system.
May cause sensitisation by skin contact
May cause lung damage if swallowed.
Vapours may cause drowsiness and dizziness.

Environment:

Toxic to aquatic organisms, may cause long-term adverse effects in the environment.

4. FIRST-AID MEASURES

General:

If patient is unconscious or having convulsions do not induce vomiting or give fluids to drink.

Inhalation:

Move to fresh air. Seek medical attention immediately.

Skin Contact:

Take off contaminated clothing, goggles, and respirator . If skin irritation persists, call a physician. Wash off with soap and plenty of water.

Eye Contact:

Flush immediately with plenty of water for at least 15 minutes. Seek medical attention if irritation exists.

Ingestion:

Do not induce vomiting. Obtain medical attention. If swallowed, seek medical advice immediately and show this container or label.

Medical Information:

For specialist advice doctors should contact the **National Poisons Information Centre - Beaumont Hospital, Beaumont, Dublin 9. Tel: 01-8092566**

No specific antidote known. Excessive exposure signs/symptoms may be effects to central nervous system such as dizziness, headache or anaesthesia. Suggest oesophageal and/or endotracheal control if lavage is performed. When considering emptying the stomach the danger from lung aspiration must be weighed against toxicity effects. Patient should be treated based on physician's judgement of symptoms.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media:

Dry inert powder, foam, carbon dioxide or water-spray.

Unsuitable Extinguishing Media:

Do not use a water jet.

Special Exposure Hazards:

Keep containers cool by spraying with water. Contain fire-fighting water, bunding if necessary with sand or earth.

Toxic/irritating fumes may be evolved on heating.

Protective Equipment:

In case of fire wear full protective clothing, goggles and respirator.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:	Wear as appropriate, chemical resistant rubber gloves, coated overall, PVC or rubber wellingtons and goggles. Eliminate all ignition sources.
Environmental Precautions:	Contain spillage as the situation allows. Particular care should be taken to prevent contamination of water (ditches, drains, ponds etc.).
Methods for Cleaning Up:	Absorb with sand or earth. Collect contaminated material and place in covered, labelled containers for disposal. Advise local authority if spillage enters drains or Environmental Protection Agency if spillage enters surface or ground waters.

7. HANDLING AND STORAGE

Handling:	Wear suitable protective clothing, gloves and or eye/face protection when handling the concentrate. Do not eat drink or smoke. Wash hands and exposed skin before meals and after work. Wash all concentrate from skin or eyes immediately. Do not breathe spray or vapours.
Storage:	Store in original container, tightly closed in a designated chemical store. Keep in a cool, dry place. Keep away from food and animal foodstuffs. Keep out of reach of children. Keep container tightly closed. Protect from frost.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Precautions:	Keep out of reach of children. Keep away from food, drink and animal feeding stuffs. Wash concentrate from skin or eyes immediately. Wash hands and exposed skin before eating, drinking or smoking and after work. Wash all protective clothing thoroughly after use, especially the insides of gloves. Do not breathe spray Toxic to aquatic organisms. Do not contaminate surface waters or ditches with chemical or used container. Keep in original container, tightly closed, in a safe place. Wash out container thoroughly, empty washings into spray tank, and dispose of safely.
Protective Clothing:	<i>Respiratory Protection:</i> Use an approved positive-pressure self-contained breathing apparatus in emergency conditions. Use an approved air-purifying respirator when airborne exposure guidelines/comfort levels may be exceeded. <i>Eye Protection:</i> Safety glasses with side-shields should be used when dealing with the concentrate or spray. <i>Hand Protection:</i> PVC or other plastic material gloves impervious to this material should be used when dealing with the concentrate

or spray.

Skin Protection: Protective overalls or chemical resistant suit to protect from contamination when dealing with concentrate or spray.

Occupational Exposure Limits:

None assigned for active ingredient.

Recommendation by supplier is 50 ppm for solvent.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Liquid
Colour:	Brown
Flash Point:	47 °C (PMCC)
Surface Tension:	28.0 mN/m (25°C) (EEC A5 Method)
Relative Density:	0.97 (rel; air =1)
Solubility (water and fat):	Emulsifiable in water.

10. STABILITY AND REACTIVITY

Conditions to Avoid:

Stable under normal storage conditions.

Materials to Avoid:

Direct sunlight, sparks, open flames and high temperatures (at or near flash point) should be avoided. Avoid strong basic, acidic or oxidizing materials.

Hazardous Decomposition Products:

There are no hazardous decomposition products classified under normal conditions of use and storage.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity:

Oral Toxicity: LD₅₀ Rat: > 2000 mg/kg.

Dermal Toxicity: LD₅₀ Rat: > 2000 mg/kg.

Not carcinogenic, not mutagenic, for reproduction – not toxic.

Irritation:

Slight but prolonged irritation may be caused to eyes.

Non irritating to skin.

Avoid excessive exposure, no adverse effects are anticipated by inhalation.

Sensitization:

Non sensitizer.

12. ECOLOGICAL INFORMATION

Mobility:	Contamination of ground water is unlikely as there is no evidence of any significant leaching.
Degradability:	Hydrolysed to the parent acid, Fluroxypyr. Degradability (principle route) is microbial and will readily occur.
Accumulation:	The half life in soils is about 14-56 days, depending on type of soil and conditions.
Aquatic Toxicity:	Harmful: 10mg/L<LC50<100mg/L to fish Acute Toxicity: 1mg/L,EC50<10mg/L to aquatic invertebrates 1mg/L<IC50<10mg/L to algae.
Avian Toxicity:	Mallard Duck: LD50 >2000mg/kg

13. DISPOSAL CONSIDERATIONS

Product and Waste:	Bury in approved land fill or dispose of in an authorised disposal contractor
Containers:	Dispose of via an authorised disposal contractor.

14. TRANSPORT INFORMATION

Special Transport Precautions:	UN Number 1993, Packing Group III, Class 3
Road/Rail Classification:	Flammable liquid, N.O.S. (Petroleum Distillate),
Sea Classification:	Flammable liquid, N.O.S. (Petroleum Distillate), Marine Pollutant
Air Classification:	Flammable liquid, N.O.S. (Petroleum Distillate), Marine Pollutant

15. REGULATORY INFORMATION



Xn



N

Xn	Harmful
N	Dangerous for the Environment

R- PHRASES

- R10** - Flammable
- R37/38** - Irritating to respiratory system and skin
- R43** - May cause sensitisation by skin contact
- R51/53** - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R65** - Harmful: may cause lung damage if swallowed.
- R67** - Vapours may cause drowsiness and dizziness.

S- PHRASES

- S2** - Keep out of reach of children.
- S13** - Keep away from food, drink and animal feeding stuffs.
- S20/21** - When using, do not eat, drink or smoke.
- S23** - Do not breath spray
- S26** - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- S28** - Avoid contact with skin, wash immediately with plenty of water.
- S35** - This material and its container must be disposed of in a safe way.
- S36** - Wear suitable protective clothing.
- S37/39** - Wear suitable protective gloves and face protection (faceshield) when handling or applying the concentrate.
- S45** - In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).
- S49** - Keep in original container, tightly closed in a safe place.
- S57** - Use appropriate containment to avoid environmental contamination.
- S62** - If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

16. OTHER INFORMATION

Version: 1	Prepared: 01/02/01	
Version: 2	Prepared: 09/08/01	
Version: 3	Prepared: 28/06/02	
Version: 4	Prepared: 01/06/04	Update to comply with 2001/58/EC, change telephone no
Version: 5	Prepared: 26/07/04	Supplier details correction
Version: 6	Prepared: 11/12/06	Emergency phone number updated
Version: 7	Prepared: 10/04/07	Section 2 updated
Version: 8	Prepared: 29/02/08	Sections 2 and 15 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.