

MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTITIFICATION

Trade Name:	Kerb Pro Flo
Chemical Name:	3,5-Dichloro-N-(1,1-dimethyl-2-propynyl)benzamide
Synonyms:	Propyzamide
Group Name:	Amide
Formula:	$C_{12}H_{11}Cl_2NO$
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
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.	Prop	yzamide								
2.	2. Ethylene glycol									
3.	Iner	t Ingredients								
No.		CAS No.		EC No.	R Phr	ases	Conc	entration	(Classification
1.	-	023950-58-5	-	245-951-4	R40, R5	50/53	- 3	5-36%	-	Xn, N
2.	-	000107-21-1	-	203-473-3	: R22	2	-	3-4%	:	Xn
3.			-		·		-		-	Ik
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:	Limited evidence of a carcinogenic effect.
Environmental:	Very toxic to aquatic organisms, may cause long-term adverse effects in the
	aquatic environment.



4. FIRST-AID MEASURES

General:	Never give fluids or induce vomiting if patient is unconscious or is having convulsions.
Inhalation:	Move to fresh air. Consult a physician.
Skin Contact:	Wash off in flowing water or shower, use soap if available. Consult a physician if irritation persists.
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.
Ingestion:	Do not induce vomiting. Call a physician. The decision of whether to induce vomiting or not should be made by a physician.
Medical Information:	Note to Physician Supportive care. Treatment based on judgement of physician in response to symptoms of patient. For specialist advice doctors should contact the nearest Poisons Information Centre.

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: Carbon oxides. Hydrogen chloride. Nitrogen oxides.
Special Exposure Hazards:	No information
Protective Equipment:	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. Work upwind of any spill. Avoid breathing smoke. Extinguish source of fire, preferably with a dry inert powder, foam or water-spray. Keep containers cool by spraying with plenty of water. Contain fire fighting water, bunting if necessary with sand of earth

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:	Wear appropriate safety clothing and eye/face protection (see Section 8). Remove contaminated clothing immediately, wash skin
	area with soap and water, and launder clothing before reuse or



	dispose of properly.
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 for 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.
Storage:	Product should be stored in compliance with local regulations. Store in a cool, dry, well-ventilated place in the original container. Do not store near food, drink, animal feeding stuffs, pharmaceuticals, cosmetics or fertilisers. Keep out of reach of children.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Precautions:	Engineering Controls
	Provide general and/or local exhaust ventilation to control
	airborne levels below the exposure guidelines.
	Keep out of reach of children.
Protective Clothing:	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
	selfcontained breathing apparatus.
	Hand/Skin Protection
	For brief contact, no precautions other than clean body-covering
	clothing and chemical resistant 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 safety glasses. Where contact with the liquid is likely,
	chemical goggles are recommended.
Occupational exposure Limits:	Active ingredient: Dow AgroSciences recommendation is 0.1
	mg/m3.



9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:
Odour:
pH:
Water Solubility:
Boiling Point/Boiling Range:
Melting Point/Melting Range:
Flash Point:
Viscosity:
Specific Gravity:

Light brown liquid Mild 7.4-8.4 Disperses 100 °C -20 °C None (water based) 400-800 mPa.s 1.14-1.17 g/cm³

10. STABILITY AND REACTIVITY

Chemical Stability:	Is stable under normal storage conditions.
Conditions to Avoid:	None determined.
Materials to Avoid:	None known.
Hazardous Decomposition Products:	None under normal conditions of storage and use. Thermal
	decomposition products include: Hydrogen chloride.

11. TOXICOLOGICAL INFORMATION

Ingestion: Skin Contact:	Low toxicity if swallowed. The oral LD50 for rats is >5000mg/kg. The dermal LD50 for rabbits is >5000 mg/kg. Prolonged skin contact is unlikely to result in absorption of harmful amounts.
Sensitisation:	Essentially non irritating to the skin. Based largely or completely on information for similar material(s). Non-sensitising to guinea pig skin.
Eye Contact:	May cause slight temporary eye irritation.
Inhalation:	No adverse effects anticipated by this route of exposure incidental to proper handling.
Carcinogenicity:	Active ingredient: This substance is classified as a category 3 carcinogen in the EC.
Mutagenicity:	Not mutagenic.
Developmental/Reproductive Effects:	Not toxic for reproduction.

12. ECOLOGICAL INFORMATION

Assessment largely or completely based on data for active ingredient.

Aquatic Toxicity:	Material is toxic to fish on an acute basis $(1mg/L < LC50 < 10mg/L)$. Acute LC50 for daphnids is reported to be >5.6mg/L.
Persistence and Degradability:	Half-life in soils is dependent on soil type and conditions and is approximately 30 days.
Avian Toxicity:	Acute oral LD50 for mallard duck is >10000mg/kg. Acute oral LD50 for bobwhite (Colinus virginianus) is



>10000mg/kg.

13. DISPOSAL CONSIDERATIONS

Product, Containers and Waste: 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.

14. TRANSPORT INFORMATION

Road/Rail Classification:	Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE,LIQUID,N.O.S. (Propyzamide) Truck/Rail ADR/RID : 9 Label : 9 Classification Code : M6 Packing Group : III Kemler Code : 90 UN Number : 3082 Tremcard Nr. CEFIC : 90GM6-III
Sea Classification:	Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE,LIQUID,N.O.S. (Propyzamide) Sea - IMO/IMDG Class: 9 UN Nr : 3082 Label: 9 Packing Group : III EMS : F-AS-F Marine Pollutant : Y (Y/N)
Air Classification:	Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE,LIQUID,N.O.S. (Propyzamide) 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

R- PHRASES:

R40 - Limited evidence of a carcinogenic effect.

R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S- PHRASES:

S35 - This material and its container must be disposed of in a safe way
S36/37 - Wear suitable protective clothing and gloves
S57 - Use appropriate containment to avoid environmental contamination

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

16. OTHER INFORMATION

Revision 0	Date Prepared:	25/07/06		
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.