

MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Trade Name: Barclay Gallup Biograde
Chemical Name: N-(phosphonomethyl) glycine (IUPAC, CA)
Synonyms: Glyphosate
Group Name: Isopropylamine.
Formula: C₃H₈ NO₃P [RMM = 169.08]
Approved Use: Agricultural Herbicide.
Supplier: Barclay Chemicals Manufacturing Ltd.,
 Damastown Way
 Damastown Industrial Park
 Mulhuddart
 Dublin 15
Telephone No: 01 811 2900
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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.	Glyphosate isopropylamine.
2.	Surfactant
3.	Water

No.	EC No.	CAS No.	R Phrases	Concentration	Classification
1.	254-056-8	38641-94-0	R53	41.5 % w/w	N
2.		-	-	Classified	IK
3.		-	-	Classified	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: Non Hazardous.
Environment: May cause long-term adverse effects in the aquatic environment.

4. FIRST-AID MEASURES

General:	Remove patient to fresh air. Remove all heavily contaminated clothing. Always seek medical advice in cases of serious personal contamination.
Inhalation:	Move to fresh air. Seek medical advice if circumstances warrant.
Skin Contact:	Remove contaminated clothing immediately. Wash underlying skin with soap and plenty of water. If skin irritation occurs, consult a doctor.
Eye Contact:	Rinse immediately with plenty of water for at least 15 minutes. Seek medical attention if any irritation occurs.
Ingestion:	Rinse mouth. Seek medical attention immediately and show product label or this data sheet.
Medical Information:	For specialist advice doctors should contact the nearest Poisons Information Centre .

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. Product is not ordinarily combustible. Toxic 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.
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 (not galvanised or unlined steel) 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. Keep tanks well vented and clear of all sources of ignition. Wash out container thoroughly, empty washings into spray tank and dispose of safely.

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. Do not mix or store in galvanised or unlined mild steel containers or tanks. Protect from frost.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Precautions:

Wear suitable protective gloves when handling the concentrate. Wear suitable protective clothing (coveralls), suitable protective gloves and rubber boots when using low volume nozzles in a knapsack sprayer, hand-held rotary atomiser CDA sprayers, hand held weedwiping equipment or when making cut stump treatments.

Wear suitable protective clothing (coveralls), suitable protective gloves, rubber boots and face protection (faceshield) when using stem injection equipment.

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

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:

Respiratory Protection: Suitable approved respirator may be required, when dealing with the concentrate or spray.

Eye Protection: Suitable face shield should be used when dealing with the concentrate or spray.

Hand Protection: PVC or other plastic material gloves should be used when dealing with the concentrate or spray.

Skin Protection: Lightweight protective clothing to protect from contamination when dealing with the concentrate or spray.

Occupational Exposure Limits:

None assigned.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear, non-viscous liquid.
Odour:	Pungent chemical odour
pH:	4.98
Boiling Point/Boiling Range:	No information.
Melting Point/Melting Range:	Not applicable.
Flash Point:	No information.
Flammability:	Non flammable.
Autoflammability:	Does not ignite below 400 °C.
Explosive Properties:	None.
Oxidizing Properties:	None.
Vapour Pressure:	No information.
Relative Density:	1.171 g/cm ³ @ 24.7 °C
Solubility (water and fat):	Miscible in all proportions in water.

10. STABILITY AND REACTIVITY

Conditions to Avoid:	Accelerated storage tests indicate a shelf life of approx. 2 years. Keep at temperatures not exceeding 40°C and above minus 15°C.
Materials to Avoid:	Galvanised or unlined mild steel containers; store as supplied in HDPE containers
Hazardous Decomposition Products:	There are no hazardous decomposition products classified.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity:	Oral Toxicity: LD ₅₀ Rat: > 2000 mg/kg. Dermal Toxicity: LD ₅₀ Rat: > 4000 mg/kg.
Irritation:	Non irritating to eyes. Non irritating to skin.
Sensitization:	Non sensitizer.

12. ECOLOGICAL INFORMATION

Mobility:	Glyphosate is very strongly bound onto soil, it is not leached from soils.
Degradability:	Glyphosate is degraded in the soil by soil organisms.
Accumulation:	The half life of glyphosate in loamy soils under summer conditions is about 20-30 days.



13. DISPOSAL CONSIDERATIONS

Product and Waste: Bury in approved land fill or dispose of in an authorised disposal contractor
Containers: Crush or bury or burn in a proper incinerator. Dispose of via an authorised disposal contractor.

14. TRANSPORT INFORMATION

Special Transport Precautions: None.
Road/Rail Classification: Not restricted.
Classification: Not restricted.
Air Classification: Not restricted.

15. REGULATORY INFORMATION

Contains glyphosate 360g/l.

R- PHRASES

R53 - May cause long-term adverse effects in the aquatic environment.

S- PHRASES

S2 - Keep out of reach of children..
S36 - Wear suitable protective clothing.
S37 - Wear suitable protective gloves.
S46 - If swallowed seek medical advice immediately and show container or label if possible.

16. OTHER INFORMATION

Version: 1	Prepared: 02/05/00	
Version: 2	Prepared: 18/02/02	
Version: 3	Prepared: 24/06/02	
Version: 4	Prepared: 22/01/04	Update to comply with 2001/58/EC, change tel. no.
Version: 5	Prepared: 26/07/04	Supplier details correction
Version: 6	Prepared: 02/08/06	Raw material concentration correction
Version: 7	Prepared: 11/12/06	Emergency phone number updated
Version: 8	Prepared: 02/05/07	Risk and safety phrases 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.