SAFETY DATA SHEET
Barclay Gallup Biograde Amenity

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier
Product name Barclay Gallup Biograde Amenity
REACH Registration notes IN CONFORMITY WITH (REACH ) Annex II of EC Regulation no.1907/2006.

1.2. Relevant identified uses of the substance or mixture and uses advised against
Identified uses Agricultural/Horticultural Herbicide

1.3. Details of the supplier of the safety data sheet
Manufacturer Barclay Chemicals Manufacturing Ltd,
Damastown Way
Damastown Industrial Estate
Mulhuddart
Dublin 15
Ireland
Tel: + 353 1 811 29 00
Fax: + 353 1 822 46 78
email: info@barclay.ie

1.4. Emergency telephone number
+353 86 385 77 69

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture
Classification (EC 1272/2008)
Physical and Chemical Hazards Not classified.
Human health Not classified.
Environment Not classified.

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

Human health
Not classified.

Environment
The product is not expected to be hazardous to the environment.

2.2. Label elements
Label In Accordance With (EC) No. 1272/2008
No pictogram required.

Precautionary Statements
P102 Keep out of reach of children.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P302+350 IF ON SKIN: Gently wash with plenty of soap and water.
P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

2.3. Other hazards

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures
4.1. Description of first aid measures

General information
Remove affected person from source of contamination. Provide rest, warmth and fresh air. Do not give victim anything to drink if they are unconscious.

Inhalation
Move the exposed person to fresh air at once. Provide fresh air, warmth and rest, preferably in a comfortable upright sitting position. Get medical attention.

Ingestion
Get medical attention immediately! Remove victim immediately from source of exposure. Provide fresh air, warmth and rest, preferably in comfortable upright sitting position. Immediately rinse mouth and drink plenty of water or milk. Keep person under observation. Do not induce vomiting. If vomiting occurs, keep head low. Transport immediately to hospital and bring along these instructions. NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS!

Skin contact
Remove victim immediately from source of exposure. Remove contaminated clothing immediately and wash skin with soap and water. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after washing.

Eye contact
Remove victim immediately from source of exposure. Immediately flush with plenty of water. Remove any contact lenses and open eyes wide apart. Call an ambulance and continue flushing during transportation to hospital. Bring these instructions.

4.2. Most important symptoms and effects, both acute and delayed

General information
NOTE! Effects may be delayed. Keep affected person under observation. Seek medical attention for all burns, regardless how minor they may seem.

Inhalation.
No specific symptoms noted.

Ingestion
No specific symptoms noted.

Skin contact
No specific symptoms noted.

Eye contact
No specific symptoms noted.

4.3. Indication of any immediate medical attention and special treatment needed

No recommendation given, but first aid may still be required in case of accidental exposure, inhalation or ingestion of this chemical. If in doubt, GET MEDICAL ATTENTION PROMPTLY!

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media
Extinguish with foam, carbon dioxide, dry powder or water fog.

Unsuitable extinguishing media
Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products
In case of fire, toxic gases (CO, CO2, NOx) may be formed.

Unusual Fire & Explosion Hazards
Not known.

5.3. Advice for firefighters

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Barclay Gallup Biograde Amenity

Glyphosate Isopropylamine 30-60%

CAS-No.: 38641-94-0     EC No.: 254-056-8

Classification (EC 1272/2008)  Aquatic Chronic 2 - H411
Classification (67/548/EEC)  N;R51/53.

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

REACH Registration notes  IN CONFORMITY WITH (REACH ) Annex II of EC Regulation no.1907/2006.

SECTION 4: FIRST AID MEASURES

SECTION 5: FIREFIGHTING MEASURES
Special Fire Fighting Procedures
Avoid breathing fire vapours. Keep up-wind to avoid fumes. Move container from fire area if it can be done without risk. Keep run-off water out of sewers and water sources. Dike for water control. If risk of water pollution occurs, notify appropriate authorities.
Protective equipment for fire-fighters
Self contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures
Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Do not smoke, use open fire or other sources of ignition. Avoid inhalation of dust and vapours.

6.2. Environmental precautions
Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body. Do not discharge into drains, water courses or onto the ground. Do not allow to enter drains, sewers or watercourses.

6.3. Methods and material for containment and cleaning up
Clean-up personnel should use respiratory and/or liquid contact protection. Wash thoroughly after dealing with a spillage. Absorb spillage with non-combustible, absorbent material. Remove small spills with vacuum cleaner. Collect spillage in containers, seal securely and deliver for disposal according to local regulations. Inform Authorities if large amounts are involved.

6.4. Reference to other sections
For personal protection, see section 8.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling
Read and follow manufacturer's recommendations. Keep away from heat, sparks and open flame. Eye wash facilities and emergency shower must be available when handling this product. Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site. Do not eat, drink or smoke when using the product. Follow instructions and ensure correct dilution of this product before use.

7.2. Conditions for safe storage, including any incompatibilities
Keep away from heat, sparks and open flame. Keep away from food, drink and animal feeding stuffs. Protect from freezing and direct sunlight. Protect against physical damage and/or friction. Store in tightly closed original container in a dry, cool and well-ventilated place. Store in closed original container at temperatures between 0°C and 30°C.

7.3. Specific end use(s)
The identified uses for this product are detailed in Section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters
Ingredient Comments
No exposure limits noted for ingredient(s).

8.2. Exposure controls
Protective equipment
Hygiene measures
Wash contaminated clothing before reuse. Wash hands after handling. Wash hands at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke.

Skin protection
Protection suit must be worn.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Clear liquid.</td>
</tr>
<tr>
<td>Colour</td>
<td>Colourless to pale yellow.</td>
</tr>
<tr>
<td>Odour</td>
<td>Slight odour. Chemical.</td>
</tr>
<tr>
<td>Solubility</td>
<td>Miscible with water</td>
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<tr>
<td>Relative density</td>
<td>1.171g/ml</td>
</tr>
<tr>
<td>pH-Value, Conc. Solution</td>
<td>5.0</td>
</tr>
</tbody>
</table>

9.2. Other information

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity
There are no known reactivity hazards associated with this product.

10.2. Chemical stability
Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions
No information available.
Hazardous Polymerisation
Will not polymerise.

10.4. Conditions to avoid
Avoid heat, flames and other sources of ignition. Avoid frost. Avoid exposure to high temperatures or direct sunlight.

10.5. Incompatible materials
Materials To Avoid
Keep in original container.

10.6. Hazardous decomposition products
None known.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

<table>
<thead>
<tr>
<th>Toxic Dose 1 - LD 50</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;2, 000 mg/kg (oral rat)</td>
<td></td>
</tr>
<tr>
<td>Toxic Dose 2 - LD 50</td>
<td>&gt;4, 000 mg/kg (dermal)</td>
</tr>
</tbody>
</table>

Skin contact
Not a skin sensitisier. Skin irritation is not anticipated when used normally.
Eye contact
Mild eye irritant

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Acute Fish Toxicity
Not considered toxic to fish.
LC 50, 96 Hrs, Fish mg/l >326
Barclay Gallup Biograde Amenity

12.2. Persistence and degradability
Degradability
The product is expected to be biodegradable.

12.3. Bioaccumulative potential
Bioaccumulative potential
No data available on bioaccumulation.

12.4. Mobility in soil
Mobility:
The product is miscible with water. May spread in water systems.

12.5. Results of PBT and vPvB assessment
This product does not contain any PBT or vPvB substances.

12.6. Other adverse effects
Not applicable.

SECTION 13: DISPOSAL CONSIDERATIONS
General information
Waste to be treated as controlled waste. Disposal to licensed waste disposal site in accordance with local Waste Disposal Authority.

13.1. Waste treatment methods
Dispose of waste and residues in accordance with local authority requirements. Do not allow runoff to sewer, waterway or ground.

SECTION 14: TRANSPORT INFORMATION
General
The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).

Road Transport Notes
Not regulated.

Rail Transport Notes
Not regulated.

Sea Transport Notes
Not regulated.

Air Transport Notes
Not regulated.

14.1. UN number
Not applicable.

14.2. UN proper shipping name
Not applicable.

14.3. Transport hazard class(es)
Not applicable.

Transport Labels
No transport warning sign required.

14.4. Packing group
Not applicable.

14.5. Environmental hazards
Environmentally Hazardous Substance/Marine Pollutant
No.

14.6. Special precautions for user
Not applicable.
14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
Not applicable.

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU Legislation

15.2. Chemical Safety Assessment
No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Revision Date 21/08/2013
Revision 0
Risk Phrases In Full
NC Not classified.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Hazard Statements In Full
H411 Toxic to aquatic life with long lasting effects.

Disclaimer
This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.