

PRODUCT SAFETY DATA SHEET

GLYFOS DAKAR PRO
A herbicide for use in amenity, industrial and aquatic situations

1. Marketed by:

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2. Composition:

A water-soluble granule containing 68% w/w glyphosate as the monoammonium salt

Ingredient	Classification	Risk Phrases
Glycol ethers of aliphatic amines (7-13%)	N	R51/53

3. Hazards:

3.1 Classification of Preparation:

The (CoSHH) Control of Substances Hazardous to Health Regulations may apply to the use of this product at work.

3.2 Primary Hazards

May be mildly irritating to the eyes and skin.

4. First Aid Measures:	
4.1 Eyes:	Irrigate gently with clean water for at least 15 minutes. Seek medical attention if any irritation or redness persists.
4.2 Skin:	Remove contaminated clothing. Wash thoroughly with soap and water. Seek medical attention if any irritation persists.
4.3 Ingestion:	If swallowed, dilute by drinking water. Obtain medical advice. No significant adverse health effects are likely to develop unless a significant amount (more than a mouthful) has been ingested. Ingestion may cause nausea, vomiting and diarrhoea.
4.4 Inhalation:	Remove from source of exposure and provide maximum ventilation. Guide to Doctors: This product contains a glycine herbicide of low acute toxicity. Treatment should be symptomatic and supportive. There is no specific antidote. Ingestion may cause irritation of the gastro-intestinal tract and the mouth, with nausea, vomiting and diarrhoea. Ingestion of large quantities of a similar product has been reported as resulting in hypertension and lung oedema.
5. Fire Fighting Measures:	
5.1 Suitable Extinguishing Media The product will not burn. Use dry chemical, foam, water spray, sand or earth.	
5.2 Unsuitable Extinguishing Media As appropriate for surrounding fire.	
5.3 Special Hazards, Combustion or By-Products If involved in a fire, fumes and vapours will be harmful and may include oxides of carbon, nitrogen and phosphorous. Prevent entry of the product or firefighting water into watercourses, ditches or drains by bunding the area with sand or earth if possible. Inform the water authorities if contamination of water is threatened or occurs.	
5.4 Protective Clothing for Fire Fighting Suitable protective clothing and breathing apparatus.	

6. Accidental Release (Spillage):

6.1 Personal Precautions

Wear suitable protective clothing (See section 8). Remove contaminated clothing immediately. DO NOT eat, drink or smoke. Keep bystanders away. Provide maximum ventilation.

6.2 Environmental Precautions

Prevent entry of the product or contaminated water into watercourses, sewers or drains. Inform the proper authorities if gross contamination of water is threatened or occurs.

6.3 Clean & Disposal Methods

Sweep up the spill, avoiding raising dust, and transfer to a container for later removal to a safe place for disposal. Thoroughly scrub the area with an industrial detergent when all the spillage has been removed. Spills that occur in circumstances where sweeping up is not possible (e.g. on soil etc.) should be dug up, placed in containers and removed to a safe place for disposal.

7. Storage and Handling:

7.1 Practical Precautions and Engineering Controls for Safe Handling

Avoid contact with skin, eyes or clothing.

7.2 Conditions and Quantity Limits for Safe Storage

Keep in original container, tightly closed. Keep cool and dry in a suitable agricultural chemical store under lock and key. DO NOT store in direct sunlight. Keep away from food, drink and animal feeding stuffs and out of reach of children. **DO NOT store, mix or apply this product or dilute solutions of it in galvanised or unlined steel containers or sprayer tanks.** Use only stainless steel, aluminium, fibreglass, plastic (HDPE or PET) or plastic-lined containers.

8. Personal Protection:

8.1 Exposure Limit Values

None applicable

8.2 Occupational Exposure Controls

Decontaminate all personal protective clothing after use.

8.3 Personal Protective Equipment

Wear coveralls, suitable protective gloves and face-shield to BS2092 when handling the concentrated product or contaminated surfaces.

9. Physical and Chemical Properties:

9.01 Appearance:	White solid, granulated
9.02 Odour:	Faint, amine-like
9.03 pH:	4 (1% solution in water)
9.04 Boiling Point / Range:	Not applicable
9.05 Flash Point / Flammability:	Not applicable; solid
9.06 Explosive Properties:	Not classified as explosive
9.07 Oxidising Properties:	Not classified as oxidizing
9.08 Vapour Pressure:	1.75 x 10 ⁻⁷ mm Hg at 25oC (glyphosate)
9.09 Relative Density:	Tap density: 0.73g/cm ³
9.10 Solubility:	Completely soluble in water
9.11 Partition Coefficient:	P=4.5 x 10 ⁻⁴ (glyphosate)
9.12 Viscosity:	Not applicable
9.13 Vapour Density:	Not applicable
9.14 Evaporation Rate:	Not applicable

10. Stability and Reactivity:

10.1 Materials to Avoid:

Avoid contact with strong alkalis. Avoid galvanised or unlined steel.

10.2 Conditions to avoid:

None known.

10.3 Hazardous Decomposition Products:

Will react with galvanised or unlined steel to produce hydrogen and highly combustible gas mixtures may form which could flash or explode causing severe injury.

11. Toxicological Information:

Acute Oral LD50:	>5000mg/kg.bw (rat)
Acute Dermal LD50:	>2000mg/kg.bw (rat)
Inhalation LC50:	No data
Irritancy:	Mildly to moderately irritating to eyes. It can have irritating effects on skin and the upper digestive and respiratory tract.

12. Environmental Protection:

12.1 Ecotoxicity:

This product is a herbicide and, therefore, toxic to all green plants. It is harmful to fish, aquatic invertebrates and aquatic plants.

LC50 (96 hour):	Rainbow Trout	>100mg/l
EC50 (48 hour):	Daphnia spp	>100mg/l
EC50 (72 hour):	Desmodesmus	>100mg/l (growth) =91.6mg/l (biomass)
LD50:	Bobwhite Quail	>2000mg/kg.bw (glyphosate)
LD50 (48 hour):	Bee	>100µg/bee

12.2 Mobility:

Strongly binds to clay particles. Not mobile.

12.3 Persistence and Degradability:

Slow to bio-degrade in the environment and waste water treatment plants. Microbial activity is the main degradation mechanism but aerobic and anaerobic degradation also occur.

12.4 Bio-accumulative Potential:

Unlikely to bio-accumulation.

13. Disposal of Unwanted Product and Used Containers:

13.1 Disposal of Used Preparation:

Consult the local authorities before disposing of unwanted chemical. It is recommended that the chemical is mixed with a combustible solvent and burned in a chemical incinerator equipped with an afterburner and scrubber.

13.2 Disposal of Packaging:

Dispose of containers by burning or as permitted by local authorities. DO NOT re-use containers for any purpose.

14. Transport Information:	
Road Transport Class:	Not hazardous
UN Number:	None
Proper Shipping Name:	Not applicable
UN Class:	Not applicable
CPL Packing Group:	Not applicable
ADR/RID Description:	None
IMDG Class:	Not applicable
15. Regulatory Information:	
Risk Phrases:	
R52:	Harmful to aquatic organisms
R53:	May cause long-term adverse effects in the aquatic environment. Very toxic to aquatic organisms.
Safety Phrases:	
S35:	This material and its container must be disposed of in a safe way
S57:	Use appropriate containment to avoid environmental contamination
16. Other Information:	
<p>The above information is intended to give health and safety guidance on the storage and transport of the substance or product to which it relates. It is not intended to apply to the use of the product, for which purpose the product label and any appropriate technical usage literature available should be consulted and any relevant licences, consents or approvals complied with. The requirements or recommendations of any relevant site or working procedure, system or policy in force or arising from any risk assessment involving the substance or product should take precedence over any of the guidance contained in this safety data sheet where there is a difference in the information given. The information provided in this safety data sheet is accurate to the best of the issuer's available knowledge at the date of publication, and will be updated as and when appropriate. No liability will be accepted for any loss or damage resulting from any failure to take account of information or advice contained in this safety data sheet.</p>	