

Portman Glyphosate

SECTION 1 – IDENTIFICATION OF THE SUBSTANCE AND COMPANY

TRADE NAME: Portman Glyphosate
DESCRIPTION: Aqueous concentrate herbicide product

ADDRESS: PORTMAN AGROCHEMICALS LTD
 Maidenstone Heath
 Blundell Lane
 Bursledon
 Southampton
 England
 SO31 1AA

TELEPHONE: 023 8040 6640

SECTION 2 – COMPOSITION / INFORMATION ON INGREDIENTS

C.A.S. NUMBER:	COMPONENT (S)	% W/W
38641-94-0	Isopropylamine salt of Glyphosate	41
61791-26-2	Ethoxylated tallowamine surfactant	15

SECTION 3 – HAZARDS IDENTIFICATION

Human health effects

On the basis of available information, this material is not expected to produce any significant adverse health effects when recommended use instructions are followed.

Environmental effects

On the basis of available information, this material is not expected to produce any significant adverse environmental effects when recommended use instructions are followed.

SECTION 4 – FIRST AID MEASURES

INGESTION: Immediately: Obtain medical advice.

SKIN CONTACT: Immediately: Wash with plenty of water. Obtain medical advice if there are persistent symptoms. Grossly contaminated clothing must be removed immediately. Wash before re-use.

EYE CONTACT: Immediately: Rinse with plenty of potable water/sterile eye wash solution. Obtain medical advice if there are persistent symptoms.

INHALATION: Remove patient to fresh air.

MEDICAL ADVICE: **Similar formulation**
 Systemic symptoms from accidental inhalation or ingestion are unlikely. Suicidal ingestion of the concentrate causes vomiting (possibly including haematemesis), abdominal pain and diarrhoea, hypovolaemia, cardiac dysrhythmias and myocardial depression and systemically-induced chemical pneumonitis. Investigations may show hypoxaemia, acidaemia and possibly an elevated serum amylase. There are no changes in cholinesterase activity. Treatment consists of gastric lavage (within 3 hours) and administration of activated charcoal and standard supportive measures. Atropine and oximes are not indicated.

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SECTION 5 – FIRE FIGHTING MEASURES

Not applicable; non flammable.

Keep containers cool by spraying with water if exposed to fire.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal precautions

Use personal protection recommended in section 8.

In confined areas: Wear breathing apparatus.

If exposed to splashes: Wear chemical goggles.

Environmental precautions

Small quantities: Low environmental hazard. Large quantities: Minimize spread.

Methods for cleaning up

Small quantities: Flush spill area with water.

Large quantities: Absorb in earth or sand.

Sweep up into containers for disposal.

Dig up heavily contaminated soil and place in drums. (Refer to section 10 for types of containers and drums.)

Flush spill area with water.

Refer to section 13 for disposal of spilled material.

SECTION 7 – HANDLING AND STORAGE

Handling

Good industrial practice in housekeeping and personal hygiene should be followed. Handle so as to minimise the chance of skin or eye contact. When using do not eat, drink or smoke. Wash hands thoroughly after handling or contact. Thoroughly clean equipment after use. For more information refer to product label. Observe all recommended safety precautions until container is cleaned, reconditioned or destroyed.

Storage

Keep out of the reach of children.

Keep away from food, drink and animal feedingstuffs.

Keep only in the original container.

Store above -15 °C

Do not store above 40 °C

Minimum shelf life: 2 years.

SECTION 8 – EXPOSURE CONTROL/PERSONAL PROTECTION

Engineering measures

See section 10- “materials to avoid” for equipment.

Occupational exposure limit

Not applicable.

Respiratory protection

No special requirement when used as recommended.

Hand protection

Wear impermeable gloves.

Eye protection

No special requirement when used as recommended.

Skin protection

Wear suitable protective clothing.

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SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

(Note: N/A = Not Applicable, N/D = Not Determined)

APPEARANCE:	Clear solution
COLOUR:	Light Yellow to Amber
ODOUR:	Practically odourless
pH as supplied	4.4-4.9 (5% soln.)

SECTION 10 – STABILITY AND REACTIVITY

Conditions to avoid

Heating > 100°C may generate pressure due to steam formation from the water present
If very strongly heated gives off harmful fumes.

Materials to avoid

This material will react with galvanised or unlined steel (except stainless steel) to produce hydrogen, a highly flammable gas that can cause explosions.
Should be mixed, stored and applied in stainless steel, aluminium, fibreglass, plastic or plastic lined steel containers.

Hazardous decomposition products

Phosphorus pentoxide, carbon dioxide.

SECTION 11 – TOXICOLOGICAL INFORMATION

Laboratory data

Similar formulation

Oral LD₅₀ (rat): > 5000 mg/kg.

Dermal LD₅₀ (rabbit): > 5000 mg/kg.

Overall mean EU eye irritation scores (OECD test₁ 24 h) (rabbit):

conjunctival redness: 1.78

conjunctival swelling: 1.17

iris lesions: 0

corneal opacity: 0

Lesions reversible by 7 days

Slightly irritating to eyes but not sufficient for classification.

Overall mean EU skin irritation scores (OECD test, 4 h) (rabbit):

redness: 0.33

swelling: 0

Guinea pig Buehler test: 0 % positive incidence.

Inhalation LC₅₀ (rat): 3.28 mg/l/4h (concentrate).

Inhalation LC₅₀ (rat): no deaths at 5.7 mg/l/4h (3 fold dilution), highest attainable concentration.

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Inhalation LC₅₀ (rat): no deaths at 8.9 mg/l/4h (50 fold dilution, used at spray operations), highest attainable concentration. All three inhalation tests were carried out with aerosol particle sizes (< 10 µm) much lower than the droplet size (> 100 µm) normally achieved during spraying operations.

Active ingredient

Tests on glyphosate showed that it did not cause any mutagenic, carcinogenic, teratogenic or adverse reproductive effects. Is not neurotoxic and does not inhibit cholinesterase.

Human data

Similar formulation

Predictive patch testing on human volunteers did not produce irritation or sensitisation. Direct eye contact may cause temporary eye irritation and conjunctivitis. Prolonged or repeated contact with surfactants may cause defatting of the skin and result in dermatosis. If swallowed, may cause gastrointestinal tract irritation (discomfort, nausea, vomiting, diarrhoea) If large quantities of the concentrated product are swallowed, may result in hypotension & pulmonary edema.

SECTION 12 – ECOLOGICAL INFORMATION

Similar formulation

Aquatic toxicity

LC₅₀ 96 h:

Bluegill sunfish (Lenomis macrochirus) = 40 mg/l

Rainbow trout (Oncorhynchus mykiss): > 100 mg/l

EC₅₀ 48 h:

Water flea (Daphnia magna) = 100 mg/l

Active ingredient

Avian toxicity

LD₅₀ Acute, Oral:

Bobwhite quail (Colinus Virginianus): > 4640 mg/kg body weight.

LD₅₀ 8 day dietary (5 day treatment):

Mallard duck (Anas platyrhynchos): > 4640 mg/kg diet.

Bobwhite quail (Colinus Virginianus): > 4640 mg/kg diet.

Wildlife toxicity

LD₅₀ 48 h, Topical:

Honey bee (Anis mellifera): > 100 µg/bee

LD₅₀ 48 h, Oral:

Honey bee (Apis mellifera): > 100 µg/bee

LC₅₀ 14 days:

Earthworm (Eisenia foetida): > 1000 mg/kg

Bioaccumulation

Tests in a variety of mammalian/avian/aquatic species: no bioaccumulation

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Dissipation

Glyphosate in surface water: 50 % dissipation: +/- 4 days.
90 % dissipation: < 20 days.

SECTION 13 – DISPOSAL CONSIDERATIONS

Product

Small quantities: Low environmental hazard; bury only in approved landfill.

Large quantities: Send to special chemical waste disposal facility or burn only in special, controlled high temperature incinerator.

As far as possible recover and store any remaining non-contaminated product in original package of the same product.

Containers

Triple rinse empty containers.

Pour rinse water into spraytank.

Give them to public waste disposal services.

To be disposed of as hazardous waste.

Do not re-use containers.

Do not contaminate waterways, ponds or ditches.

All local and national regulations should be followed.

SECTION 14 – TRANSPORT INFORMATION

- Not classified as dangerous to transport

SECTION 15 – REGULATORY INFORMATION

- Not classified as dangerous

SECTION 16 – OTHER INFORMATION

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