

PRODUCT SAFETY DATA SHEET

ASTEROID PRO®

1. Identification of the Preparation and the Company:

Trade Name: **ASTEROID PRO®**

A herbicide for use in horticulture, forestry and aquatic situations

Company Identification:

Headland Agrochemicals Ltd

Rectors Lane

Pentre

Deeside

Flintshire CH5 2DH

U.K.

[REDACTED]

[REDACTED]

E-Mail:

[REDACTED]

2. Hazards:

May be slightly irritating to skin and eyes.

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

3. Composition:

A soluble liquid containing 360 g/l (41% w/w) glyphosate as its isopropylamine salt* with surfactants and water

* contains 480 g/l of glyphosate isopropylamine salt, equivalent to 360 g/l glyphosate acid.

Hazardous components:

Glyphosate isopropylamine salt

EU Classification: N

Risk phrase R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

4. First Aid Measures:

Eyes: Irrigate with clean water for at least 15 minutes. Seek medical attention if any irritation or redness persists.

Skin: Remove contaminated clothing. Wash thoroughly with soap and water. Seek medical advice if any irritation persists.

Ingestion: If swallowed dilute by drinking milk. Obtain medical advice.

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Inhalation: Remove from 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

Asteroid Pro will burn. If involved in a fire, fumes and vapours will be harmful and may include oxides of carbon, nitrogen and phosphorus. Fire fighters should wear full protective clothing and breathing apparatus.

Use dry chemical, foam, water spray, sand or earth. Prevent entry of the product or contaminated 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.

6. Accidental Release (Spillage)

Wear suitable protective clothing (see Section 8). Remove contaminated clothing immediately.

Do not eat drink or smoke. Keep bystanders away.

Provide maximum ventilation. Absorb the spill onto absorbent clay or sand, sweep up 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, then rinse thoroughly. Spills which soak into the ground should be dug up, placed in containers and removed to a safe place for disposal. Prevent the spillage or washing water from entering watercourses sewers or drains. Inform the proper authorities if gross contamination of waterways, sewers or drains is threatened or occurs.

7. Storage and Handling

Keep in original container, tightly closed

Keep cool and dry in a suitable agricultural chemical store under lock and key

Keep away from food, drink and animal feedingstuffs 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

Wear coveralls, suitable protective rubber gloves and face-shield to BS2092 when handling the concentrated product or contaminated surfaces. Avoid breathing the spray mist when using.

Decontaminate all personal protective equipment after use.

Occupational Exposure Limits: None applicable

9. Physical and Chemical Properties

Appearance: a clear amber liquid

Odour: Slight amine odour

Solubility: Completely soluble in water

Specific gravity: 1.169 at 20°C

Vapour pressure: 1.75×10^{-7} mm Hg at 25°C (for glyphosate free acid)

Partition coefficient: $P=4.5 \times 10^{-4}$, $\text{LogP} = -3.3$ (for glyphosate free acid)

PH: 5.1

Flashpoint: >70°C (Pensky-Marten CC)

Boiling point: >100°C

Viscosity: 24.6 mPas at 25°C

10. Stability and Reactivity

Stability: Very stable. Stores for at least 2 years in original containers in normal agricultural chemical storage conditions.

Reactivity: Avoid strong alkalis. **Avoid galvanised or unlined steel.** The product will react with these materials to produce hydrogen. Highly combustible gas mixtures may form which could flash or explode causing severe injury.

11. Toxicological Information

Acute Toxicity:

This product is of low acute toxicity:

Acute oral LD50: >5,000 mg/kg.bw (rat)

Acute dermal LD50: >5,000 mg/kg.bw (rat)

Inhalation LC50: > 4.72 mg/litre

Irritancy: Very mild irritant to eyes. Non-irritating to skin.

Sensitisation potential: Not a sensitiser

Carcinogenicity: EPA category E (Non-carcinogenic)

Chronic toxicity: Not mutagenic or teratogenic

12. Environmental Protection

Toxicity to:

Fish: 96-hour LC50 = >1,000mg/l (Rainbow trout)

Aquatic invertebrates: 48 hour EC50 (Daphnia spp) = 610 mg/l

Aquatic Algae: 96 hour EC50 (Selanastrum spp) = 189 mg/l

13. Disposal of Unwanted Product and Used Containers

Consult the local authorities before disposing of unwanted chemical.

Dispose of used containers by burning or landfill as permitted by local authorities. Do not re-use containers for any purpose.

14. Transport Information

Road Transport: Not hazardous

UN Number: None

Proper Shipping Name: None

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UN Class: N/A

CPL Packing Group: N/A

ADR/RID Description: None

IMDG Class: N/A

ICAO/IATA Class: N/A

15. Regulatory Information

Risk Symbol: Not classified

Risk and safety phrases: No statutory phrases apply

16. Other Information

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.

Asteroid is approved by the UK Chemicals Regulation Directorate for use as a herbicide.

Registration number MAPP 15373

Asteroid Pro is a product of Cheminova A/S, Lemvig, Denmark

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