

MATERIAL SAFETY DATA SHEET

1. Identification of the substance/preparation and of the company/undertaking.

Trade name: Nasa Herbicide
Composition : 360 g/L glyphosate (480 g/L glyphosate IPA salt).
Use: Herbicide
Supplier : Agromarketing Company, Inc.
133 Mavety St.
Toronto, ON M6P 2L8 Canada

Emergency telephone: call CHEMTREC 1-800-424-9300

2. Composition/information on ingredients.

Information on ingredients.

Active Ingredient Glyphosate IPA salt 480g/L (equivalent to 360 g/L glyphosate)

Tallow alkylamine ethoxylate CAS No 61791-26-2 10 to 20%

Fatty alcohol polyethoxylate CAS 25322-68-3 up to 4%

3. Hazard identification.

DANGEROUS FOR THE ENVIRONMENT

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Toxic to plants

4. First-aid measures.

Inhalation: Remove to fresh air until recovered. If patient has difficulty in breathing seek medical attention.

Ingestion: Seek medical advice immediately do not induce vomiting.

Skin contamination: Remove contaminated clothing and wash affected areas with soap and water. Seek medical attention had problems persist.
Launder contaminated clothing before re-use.

Eye contamination: Irrigate with fresh water for at least 15 minutes. Seek medical attention if problems persist.

Advice for medical practitioners: Treat symptomatically.

5. Fire fighting measures.

Extinguishing media:	Water spray, foam, dry chemicals (powder), carbon dioxide.
Unusual fire hazards:	Non flammable. Use water spray to cool containers.
Fire fighting procedures:	Fire fighting personnel or others expose to products of combustion should wear full protective clothing and SCBA equipment. Thoroughly decontaminated equipment after use.
Special precautions:	Care should be taken to prevent access to watercourses, drains and public sewers of water used in fire fighting procedures.

6. Accidental release measures.

Personal precautions:	Avoid contact with skin and eyes. Wear face protection, impervious gloves and footwear.
Environmental precautions:	Do not allow to enter drains or watercourses. Advise relevant authorities if contamination of public water s occur.
Clean up procedures:	Contain spills and absorb with sand or commercial absorbent product. Wash contaminated area with water. Place contaminated material including washing water and drying materials in clearly marked drums for disposal by a registered waste disposal contractor. Inform the relevant local/national authorities if the spillage occurs in a public place. If large spillages occur the authorities should be informed.

7. Handling and storage.

Handling precautions:	No specific handling precautions apply to unopened containers. Follow relevant manual handling guidance and good this industrial practice procedures. When handling opened containers eye protection and impervious gloves and footwear are required.
Storage:	Do not allow the product to remain in contact with ferrous or galvanised materials for extended periods of time as hydrogen gas will be formed that could present a fire/explosion hazard. Ideally store in designated chemical stores away from children, human and animal foods.

8. Exposure control/personal protection.

Exposure limits:	No exposure limits have been determined.
Protected gloves:	Recommended when handling the concentrate and dilute formulations.
Face protection:	Recommended when handling concentrate..
Protected footwear:	Impervious footwear is recommended when handling the concentrate.

9. Physical and chemical properties.

Physical form: Light yellow liquid.
Boiling point range: 100⁰C.
Flashpoint/flammability: Not flammable.
Explosive/oxidising properties: Not applicable.
Viscosity: 81.9 @ 100rpm 20⁰C.
Density: 1.1982 g/ml at 20⁰ C
Water solubility: Completely misable.
Acidity: pH 4.65 (1% solution).

10. Stability and reactivity.

Conditions to avoid: Strong heating (production of oxides of carbon, nitrogen, phosphorus), contact with strong acids and oxidizers.
Materials to avoid: Contact with ferrous and galvanised metals can result in the production of hydrogen (flammable and explosive).
Store only in non-reactive containers and do not use metal tanks (other than stainless steel) for storage of both the concentrate and dilute solutions.

11. Toxicological information.

Acute toxicity: Oral LD₅₀ - >2000mg/kg
Dermal LD₅₀ - >2000mg/kg
Eye irritation – non irritating.
Skin irritation - non irritating.
Skin sensitisation - not a skin sensitiser.

12. Ecological information.

Biodegradation: Median disipation time (DT50) in US soil (field), 14 days.
Acute toxicity: Birds LD₅₀ - >2000 mg/kg
Fish LC₅₀ 96hr – 6.09mg/L
Daphnia EC₅₀ 48hr – 28.62 mg/L
Algae E_bC_r EC₅₀ 72 hr – 34.3 mg/L
Earthworm LC₅₀ - >5000mg/kg
Bees LC₅₀ (oral and contact) - >100µg/bee.

13. Disposal considerations.

Disposal methods: The product in small quantities may be disposed of in domestic waste disposal in accordance with local regulations. Larger quantities should be disposed of in accordance with the current regulations by high-temperature incineration.

14. Transport information.

Special transport precautions: Marine pollutant.

Road transport: ADR/RID – UN 3082 -environmentally hazardous
substances liquid n.o.s.
Class 9, Packing group III.

Marine classification: IMDG – UN 3082 - environmentally hazardous
substances liquid n.o.s.
Marine pollutant - Yes.

Air classification: ICAO/IATA - - UN 3082 - environmentally hazardous
substances liquid n.o.s.

15. Regulatory information.

US EPA Registration Number: 87845-2

Nasa Herbicide is classified as follows:

DANGEROUS FOR THE ENVIRONMENT

Risk phrases

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Toxic to flora.

Safety phrases.

Keep locked up and out of reach of children.

Keep away from food, drink and animal feedingstuffs.

When using do not eat, drink or smoke

Do not breathe spray.

Avoid contact with the eyes.

In case of contact with the eyes rinsed immediately with plenty of water and seek medical advice.

Take of immediately all contaminated clothing.

Do not empty into drains, dispose of this material and this container in the safe way.

Wear suitable protective clothing, gloves and eye/face protection.

Keep only in original container.

If swallowed, do not induce vomiting: seek medical advice and showed this container or label.

16. Other information.

Information contained herein is to the best of our knowledge correct but no warranty, expressed or implied, is given as to the accuracy of this data.

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