

Product Safety Data Sheet

1. Chemical product and company identification

- 1.1. **Prepared Date:** Jan. 7. 2009
- 1.2. **Production Information:**
Trade Name: Glystop-480 SL (48% glyphosate IPA).
- 1.3. **Information about manufacturer / supplier :**
Saudi Delta Company for Chemical Industries
Riyadh – Saudi Arabia – 3rd Industrial City
Tel. 00966-1-2654533 Fax. 00966-1-2654532
P.O. Box 355809 Riyadh 11383 Saudi Arabia

2. Information on ingredients

2.1. Chemical properties (Component Substances).

The product is a mixture of one active ingredient, Surfactant, and de-ionized water.

- Glyphosate IPA: 48% w/v (Non-selective systemic herbicide)
- Surfactant: 15% w/v (Wetting agent intended for improvement of the efficiency of herbicides when applying to the crop)
- De-ionized water: Up to 100% V.

2.1.1. Glyphosate IPA:

CAS No.: [38641-94-0] unstated stereochemistry.

Mol. wt: 228.2

Mol. Formula: C₆H₁₇ N₂O₅P.

Solubility: Very soluble in water.

2.1.2. Surfactant:

Chemical Composition: Tallow amine ethoxylates

Appearance (20°C): Yellow brown Liquid.

pH (1% aq. Sol): 9-10.5

Density 20°C: approx. 1.055gm/ml

Flash. Point: >100°C.

Pour point: approx. >10°C.

Viscosity (20°C): approx.300mPa.s

Solubility (25°C): soluble in Isopropanol, Octanol, Water.

3. Hazard Identification

- 3.1. **Dangerous Substances:** Glystop-480 hazards to human and domestic animals.
- 3.2. **Important Hazardous:** Spray solutions of this product should be mixed, stored, stored and applied using only stainless steel, aluminium, fiberglass, plastic or plastic lined steel containers.
- 3.3. **Sings and Symptoms:**
This product (if swallowed) will cause gastrointestinal tract irritation (Vomiting, diarrhea, colic, etc).

4. First aid Measures

- 4.1. **If in Eyes:** Hold eyelids open and flush with plenty of water get medical attention .
- 4.2. **If Inhaled:** remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to mouth.
- 4.3. **If Swallowed:** This product will cause gastrointestinal tract irritation. Immediately dilute by swallowing water or milk, get medical attention. Never give anything by mouth to an unconscious person.

5. Fire Fighting Measures

- 5.1. This product or spray solutions of this product react with such containers and tanks to produce hydrogen gas which may form a highly combustible gas mixture. This gas mixture could flash or explode, causing serious personal injury if ignited by open flame, spark welder's torch, lighted cigarette or other ignition source.
- 5.2. **Extinguishing media :**
- 5.2.1. Suitable: Carbon dioxide, foam, water fog, dry chemical and halogenated agents.
- 5.2.2. Not to be used: Don't use water except in case of important fire.
- 5.2.3. Protection against fire: Keep a way from sources of ignition. 5.2.

6. Accidental Release Measures

6.1. Personal precautionary measures :

- 6.1.1. **Respiratory protection :** In case of insufficient ventilation wear a pesticide respirator jointly approved by the local authorities .
- 6.1.2. **Protective gloves :** wear heavy duty , natural rubber gloves , or chemical resistant gloves such as Barrier laminate or Nitrile Rubber or. Neoprene rubber or viton .
- 6.1.3. **Eye protection :** wear safety goggles .
- 6.1.4. **Other protection :** wear water-proof pants , coat , hat , rubber boots or rubber overshoes.
- 6.2. **Environmental Precaution :** Stop any eventual leakage.
- 6.3. **After spillage / leakage on soil:** Liquid spillage should be dammed off and pumped into containers; soak up remainder with absorbent material and dispose of in accordance with local regulations .

7. Handling and Storage

7.1. Don't apply when weather conditions favor drift from treated area . Don't contaminate lakes , streams , ponds . When using don't eat , drink , or smoke . Don't breath spray .

Wash hands and exposed skin before meals and after work.

Wash out container thoroughly and dispose of safety . Store in original container in a cool , dry , well-ventilated , secure area out of reach of children and animals store in original container , tightly closed in a safe place .

8. Exposure controls , Personal Protections .

8.1. **Personal Protection:** Don't breath spray, after treatment, wash and change clothes prior anything else like eating, drinking, or smoking.

8.2. **Respiratory Protection :** Wear a suitable mask.

8.3. **Skin Protection :** Wear a suitable protective clothing mask.

8.4. **Eye Protection :** Wear eye, face protection.

8.5. **Ingestion :** Don't eat, drink, or smoke during application.

9. Physical and chemical properties

9.1. **Shape:** Liquid.

9.2. **Colour:** yellowish.

9.3. **Odour:** Odourless.

9.4. **Product use:** Agricultural uses (Herbicide).

9.5. **Melting point:** Not applicable.

9.6. **Boiling Point:** Not available.

9.7. **Specific gravity (20°C):** 1.15

9.8. **Vapour Pressure (mm Hg):** Not available.

9.9. **Viscosity (CPS) 25°C:** 70 CPS

9.10. **Solubility in water:** Freely soluble.

9.11. **Flammable Limits:** Not available

9.12. **pH (pure):** 4 ~ 6

9.13. **Flash point:** Not applicable.

10. Stability and Reactivity

10.1. **Hazardous decomposition:** Glystate 36 stable under normal. Conditions (25°C), stable up to 60°C and stable to Light. Providing that pH value had been kept from 5.5- 6. If reacted with acid, alkali or amine, the product may be precipitate.

10.2. **Dangerous product of decomposition:**

This product or spray solutions of this product react with such containers and tanks to produce hydrogen gas which may form a highly combustible gas mixture. This gas mixture could flash or explode, causing serious persinal injury if ignited by open flame, spark welder's torch, Lihted cigarette or other ignition source.

11. Toxicological Information

11.1. Acute oral. (LD50):

Rats: For 800 mg/kg

11.2. Inhalation: LC50 (4h) for: **Rats:** > 1.3 mg/L air (technical)

11.3. Domestic animals:

This product is considered to be relatively non-toxic to dogs and other domestic animals; however, ingestion of this product or large amounts of freshly sprayed vegetation may result in temporary

gastrointestinal irritation (vomiting, diarrhea, colic, etc). If such symptoms are observed, provide the animal with plenty of fluids to prevent dehydration.

12. Ecological Data (For glyphosate):

12.1. Birds:

Acute oral LD50 for bobwhite quail >3850mg/kg. Eight-day dietary LC50 for quail and ducks > 4640 mg/kg diet.

12.2. Fish:

LC 50 (96h) for trout 86, bluegill sunfish 120 mg/l.

12.3. Bees:

Contact and oral LD50> 0.1 mg/bee.

12.4. Daphnia:

EC50 (48h) >780 mg/l.

13. Disposal Considerations

13.1. Pesticides Disposal

Pesticide wastes are toxic . Improper disposal of excess pesticide , spray mixture , or rinsate is a violation of Federal law . If these wastes cannot be disposed of use according to label instructions contact . Environmental Control Agency , or the Hazardous Waste representative at the nearest EPA Regional Office for guidance .

13.2. Container disposal

13.2.1. Metal containers : Triple rinse (or equivalent) . Then offer for recycling or reconditioning , or puncture and dispose of in a sanitary landfill , or by other procedures approved by local authorities. Do not cut or weld metal containers .

13.2.2. Plastic containers : Triple rinse (or equivalent) . Then offer for recycling or reconditioning , or puncture and dispose of in a sanitary landfill , or incineration , or , if allowed by authorities , by burning . If burned, stay out of smoke .

13.2.3. Returnable / Refillable Sealed Containers : Don't rins container. Do not empty remaining formulated product . Do not break seals . Return intact to point of purchase .

14. Transport Information

GGVE/GGVS: 8/39C

RID/ADR: 8/39C

IMDG-Code: 8/ III EMS: 8-15

MFAG: 7604.3

IATA/ICAO: 8/ III PAX: 822

15. Regulatory Information

15.1. Toxicity Classifications : Moderately Hazardous

Warning Symbol :

X

15.2. R-Phrase

R36/38 : Irritating to eyes and skin .

15.3 S-Phrase

S26 : In case of contact with eyes , rinse immediately with plenty of water and seek medical advice .

16. Other Information

16.1. **Antidote:** No specific antidote, symptomatic treatment is recommended.

16.2. Precaution:

- Read the label before use and always follow it's instruction strictly.
- Avoid spray in windy weather and against wind.
- Before use wear protective clothes, goggles, gloves and face shield.
- Avoid eat, drink, or smoke during application.
- Always dispose empty containers safely.
- Toxic to fish.

16.3. Notice:

Mobedco warrants that the product conforms to it's chemical description and is reasonably. Fit for the purpose stated on the label when used in accordance with directions under normal conditions of use, but neither this warranty nor any of the warranty is valid for misuse and /or bad storage conditions.