

**1: IDENTIFICATION**

<b>Chemical Name</b>	Glyphosate Isopropylamine Salt		
<b>Synonyms</b>	Glyphosate 41 % SL		<b>Trade Name</b> GLYCLEAN (GLYPHOSATE 41 % SL)
<b>Uses</b>	Herbicides		<b>Molecular Formula</b> C <sub>6</sub> H <sub>17</sub> N <sub>2</sub> O <sub>5</sub> P
<b>Manufacturer/ Supplier</b>	Ulink AgriTech Pvt. Ltd. Office Nos. 001 And 002, Ground Floor Wing "A" And Nos. 003 And 004 Ground Floor Wing "B", Nyati Tech Park, Wadgaon Sheri, Pune - 411014, Maharashtra		
<b>Emergency Contact</b>	9503095030	<b>E-mail</b>	<a href="mailto:info@agrostar.in">info@agrostar.in</a>

**2: COMPOSITION/INFORMATION OF INGREDIENTS**

Chemical Name	CAS #	Percent or Content (w/w)
Glyphosate, Isopropylamine Salt	38641-94-0	41.0%
Other Ingredients	-	59.0%

**3: HAZARD IDENTIFICATION**

<b>Physical/Chemical Hazard:</b>	Acute toxicity, Category 4; Reproductive toxicity, Category 1B	
<b>Human Health Hazard:</b>	H302 Harmful if swallowed	H320 Causes moderate eye irritation
	H360Df May damage the unborn child. Suspected of damaging Fertility	
<b>Environmental Hazard:</b>	H412 Harmful to aquatic life with long lasting effects	

**4: FIRST AID MEASURES**

**General:** First aid personnel should pay attention to their own safety and use protective equipment if there is a potential for exposure to product. Have a product container or label with you when calling a poison control center or doctor, or going for treatment.

**Inhalation:** Move patients to fresh air. Keep the patients calm. Allow patients to rest. Immediately seek medical attention.

**Ingestion:** Rinse mouth with water and give plenty of water to drink. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person. Seek medical attention immediately.

**Skin contact:** In case of contact with product, immediately rinse with plenty of water. Remove and isolate contaminated clothing and shoes. Seek medical attention.

**Eye Contact:** Rinse immediately with plenty of water for several minutes with eyes wide open. After 5 minutes remove contact lenses if present and continue rinsing with plenty of water. Continue to rinse with eyelid wide open for at least 15-20 minutes. Seek medical attention if irritation develops.

**Note to physician:** This product is not an inhibitor of cholinesterase. Treatment with atropine and oximes is not indicated

**5: FIRE FIGHTING MEASURES**

**Extinguishing Media:** Water spray, foam, dry powder, carbon dioxide

**Specific Hazards:** Noxious fumes including carbon monoxide (CO), phosphorus oxides (PxOy), and nitrogen oxides (NOx) may produced under fire conditions

**Special Procedures:** Minimize use of water to prevent environmental contamination. Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations. If possible remove containers from fire zone, cool them with water spray.

**Protection of Fire Fighters:** Do not breathe a fumes, Wear a self contained breathing apparatus. Wear suitable protective gloves and eye/face protection. If area is not too heavily exposed to fire, and if conditions permit, let fire burn itself out, since water may increase the contamination hazard.

**6: ACCIDENTAL RELEASE MEASURES**

**Personal Precautions:** Ventilate spillage area. Avoid breathing fume. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from spill/ fumes.

**Environmental Precaution:** Do not allow runoff to enter drains and public waters. Notify the authorities if product enters. Do not discharge into the subsoil/soil.

**Methods for Cleaning-up:** For small amount, flush spill area with water. For large amount, clean up spillage using absorbent materials, earth or sand. Dig up heavily contaminated soil. Collect in containers for disposal. Dispose of absorbed material in accordance with regulations. Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations. Wear suitable protective equipment.

**7: HANDLING & STORAGE**

**Handling:** Do not smoke, drink, or eat during handling. Wash hands using liquid detergent. Wear protective clothing to avoid contact and/or inhalation with the product. Emptied containers retain vapor and product residue.

**Specific Conditions:** Min.storage temperature -15°C. Max storage temperature 50°C. Partial crystallization may occur on prolonged storage below the minimum storage temperature. If frozen, place in warm room and shake frequently to put back into solution.

**Storage:** Store in cool, well-ventilated area. Keep out of reach of children. Keep in original container and tightly closed when not in use. Keep product segregate from foods and animal feeds.

## 8: EXPOSURE CONTROL/PERSONAL PROTECTION

**Engineering Measures:** Ensure area is well-ventilated and there is emergency exits and the risk-elimination area. Handle in accordance with good industrial hygiene and safety practice.

**General Protection:** Avoid contact with eyes and skin. While handling the product wear cotton overalls buttoned to the neck and wrist, elbow-length PVC gloves and face shield. After use and before eating, drinking and smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves and contaminated clothing.

**Personal Protection:** Follow all precautions and instructions on the label. In all other cases the following recommendations would apply.

**Respiratory Protection:** Always use NIOSH/MSHA approved respiratory protection equipment with a universal filter type including particle filter

**Skin Protection:** Wear suitable protective clothing, including long sleeved shirt, long pants and shoes with socks, gloves, or cover all, as appropriate to avoid skin contact. Any clothing or other absorbent material which has been drenched or heavily contaminated must be discarded.

**Hand Protection:** Chemical-resistant gloves made of any waterproof material such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyvinyl chloride (PVC) or Viton.

**Eye protection:** Safety goggles, chemical splash goggles or face shield for eyes protection should be used. Safety showers and eyewash should be easily available.

**Others:** Wash clothing before reusing.

## 9: PHYSICAL/CHEMICAL PROPERTIES

<b>Appearance:</b> Clear Liquid	<b>Density[g/cc]:</b> 1.18 at 20°C	<b>Physical State:</b> Liquid	<b>pH:</b> 4.4-5
<b>Colour:</b> Yellow	<b>Odour :</b> Mild Aromatic	<b>Flash point [°C]:</b> >113	<b>Solubility in water:</b> Soluble

## 10: STABILITY & REACTIVITY

**Stability:** Stable under normal circumstances

**Conditions to avoid:** Temperature below -15°C and above 50°C

**Hazardous Thermal Decomp. Products:** Noxious fumes including carbon monoxide (CO), phosphorus oxides (PxOy), and nitrogen oxides (NOx) may produce.

**Material to avoid:** Galvanized steel or unlined mild steel. React to produce hydrogen, a highly flammable gas that could explode; Caustic materials

## 11: TOXICOLOGICAL INFORMATION

Rat oral LD50 [mg/kg]: > 4,000	Rat inhalation LC50 [mg/l/4h]: 5.7	Skin irritation (rabbit): Slight Irritant
Dermal (rat) LD50 [mg/kg]: > 4,000	Skin Sensitization (Guinea Pig): Not a skin sensitizer	Eye irritation (rabbit): Moderate Irritant

## 12: ECOLOGICAL INFORMATION

### Ecotoxicity

**Toxicity:** Material is moderately toxic to aquatic organisms and practically non-toxic to honey bee and earthworms.

Rainbow trout LC50 (96 hrs) mg/L: 5.4	Daphnia magna EC50 (48 hrs) mg/L: 11	Green algae EC50 (7 d) mg/L: 12.4
Mallard duck, LC50 mg/kg diet: > 5,620	Honey bee, LD50 (48 hrs) µg/bee: > 100	Earthworm LC50 (14 d) mg/kg soil: > 1,250

## 13: DISPOSAL CONSIDERATION

**Waste-disposal Procedures:** Dispose of this product only according to the label. Do not contaminate drains, streams, rivers or waterways with the chemical or used container. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations.

**Contaminated Packaging:** Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product. Empty containers should be taken to an approved waste handling site for recycling or disposal.

## 14: TRANSPORT INFORMATION

**UN No.** 3082 **Proper Shipping Name:** Environmentally Hazardous Substance, Liquid, N.O.S. Glyphosate IPA 41% SL

**Land Transport (ADR/RID):** Class-9, Packing group - III

**Sea Transport (IMO) (IMDG):** Class-9, Packing group - III, Marine pollutant - Yes

**Air Transport (IATA / ICAO):** Class-9, Packing group - III

## 15: REGULATORY INFORMATION

**Hazard Symbol:** GHS07, GHS08

**H - Statement:** H302, H360Df

## 16: OTHER INFORMATION

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