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## MATERIAL SAFETY DATA SHEET

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### SECTION 1 – CHEMICAL NATURE

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PRODUCT : Glyphosate 41 SL – Non selective Herbicide  
CHEMICAL NAME : N-(phosphomethyl)glycine  
CHEMICAL FAMILY : Pyrethroid  
CHEMICAL FORMULA :  $C_3H_8NO_3P$   
MOLECULAR WEIGHT : 169.07

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### SECTION 2 – COMPOSITION, INFORMATION OF INGREDIENTS COMPONENT

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	Percent Purity	CAS NO.
Glyphosate A.I.	41%	1071-83-6
Other ingredients & Water	59 %	

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### SECTION 3 – HAZARDS IDENTIFICATION SUMMARY

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#### Emergency Overview

Health Hazard likely routes of exposure Skin contact and inhalation

#### Potential Health Hazards:

Eye contact : The product may cause pain, redness and tearing.

Skin contact : The product is only slightly toxic and only slightly irritating.

Ingestion : The product only slightly toxic. The gastrointestinal discomfort with irritation in mouth, vomiting and diarrhea

Inhalation : The product is slightly toxic by this route..

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## SECTION 4 – FIRST AID MEASURES

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**IF INHALED :** Remove person from exposure area to fresh air. If not breathing difficulty ,give artificial respiration, preferably mouth to mouth. Get medical attention.

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**IF ON SKIN :** Take of contaminated clothing. Wash skin with plenty of soap and water. Get medical attention if irritation persists.

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**IF SWALLOWED :** The product will cause gastrointestinal irritation . Immediately dilute by swallowing water and milk.Get medical attention.

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**IF IN EYES :** Hold eye open and rinse with plenty of water. If irritation continues, call a doctor.

**ANTIDOTE :** Give symptomatic and supportive treatment as per symptoms and cause.

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## SECTION 5 – FIRE FIGHTING MEASURES

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**EXTINGUISHING MEDIA :** Use dry chemicals. Foam, CO2 or dry chemical. Soft stream of water fog only if needed.

**FIRE AND EXPLOSION HAZARD:** The essential breakdown products are carbon monoxide, carbon dioxide, phosphorus pentoxide and nitrogen oxides.

**FIRE FIGHTING EQUIPMENT:** Isolate fire area. Evacuate down wind. Wear self-contained breathing apparatus pressure and protective gears.. Do not smoke, gasses or vapor generated.

**HAZARDOUS COMBUSTION PRODUCTS:** None.

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## SECTION 6 – ACCIDENTAL RELEASE MEASURES

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Clean up spills immediately, observing precautions . Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Vacuum or sweep up material and place in properly labeled disposal container. Dike to confine spill and absorb with non – combustible absorbent like clay, sand or soil. Vacuum shovel or pump waste in to drum and label contents for disposal. Large spills may be neutralized with bantonite or other absorbent clays. After removal, flush contaminated area thoroughly with water . Do not allow any material to run off in soil, drainage systems or bodies of water. Notify and consult with proper regulatory authorities.

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## SECTION 7 – HANDLING AND STORAGE

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**GENERAL PROCEDURES :** Store in a cool dry , well ventilated place in original container away from children and animals. Keep away from food, animal feed , other pesticides fertilizers and drinking water. Prevent eating, drinking tobacco use and cosmetic application in areas where there is a potential for exposure to the material.

Do not mix, store or apply this product or spray solutions of this product in galvanized or unlined steel(except stainless steel) containers or spray tanks.

Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark.

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## SECTION 8 – EXPOSURE CONTROLS, PERSONAL PROTECTION

**ENGINEERING CONTROL:** Use local exhaust ventilation at all processes locations where vapor or mist may be emitted. Ventilate all transport vehicles prior to unloading.

**PERSONAL PROTECTIVE EQUIPMENT:**

**EYE AND FACE PROTECTION** - Safety goggles or face shield. Storing facility should be equipped with eye wash facility and safety shower.

**CLOTHING** – Long sleeved shirt and long pants, shoes plus socks, chemical resistant headgear for overhead exposures.

**GLOVES** – Wear waterproof gloves.

**USER SAFETY RECOMMENDATIONS** – Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside . Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible , wash thoroughly and change in to clean clothing.

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## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES(Technical)

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**PHYSICAL DESCRIPTION:** Colorless liquid.

**ODOR:** Odorless at 25 °C

**CHEMICAL FORMULA :** C<sub>3</sub>H<sub>8</sub>NO<sub>3</sub>P

**MOLECULAR WEIGHT :** 169.07

**MELTING POINT:** 189+/- 0.5°C

**DENSITY:** 1.705(20 °C)

**VAPOR PRESSURE:** 1.31 x 10<sup>-2</sup>mPa (25°C)

**WATER SOLUBILITY:** 11.6 g/l at 25°C

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## SECTION 10 – STABILITY AND REACTIVITY

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**CHEMICAL STABILITY:** Stable

**CONDITIONS TO AVOID:** excessive heat and fire.

**MATERIALS TO AVOID :** Strong oxidizing agents

**HAZARDOUS POLYMERISATION:** Product will not undergo polymerization.

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## SECTION 11 – TOXICOLOGICAL INFORMATION (Technical )

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<b>ACUTE TOXICITY:</b>	Oral LD <sub>50</sub> (rat),	– 5600.00 mg/kg body weight
	Dermal LD <sub>50</sub> (rat)	- >5000mg/kg body weight
	Inhalation LC <sub>50</sub> (rat)	- >4.98 mg/l of air
	Eye Irritation (rabbit)	– Irritant
	Skin Irritation (rabbit)	– Non irritant
	Sensitization (guinea pig)	– Weak-sensitiser

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## SECTION 12 – ECOLOGICAL INFORMATION (Technical)

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### Environmental Summary –

Glyphosate oral toxicity to Bob-white Quail >3851 mg/kg body weight

Glyphosate Rainbow trout 86, bluegill sunfish 120 LC<sub>50</sub> (96h).

Glyphosate is not toxic to bees.

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## SECTION 13 – DISPOSAL CONSIDERATIONS

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**Waste** – Open dumping or burning of this pesticide or its packing is prohibited. Dispose of in accordance with applicable Federal, State, local laws and regulations.

**Container** – plastic containers do not re-use the container. Dispose of empty containers in a sanitary landfill or incineration so as to avoid environmental or water pollution.

**DO NOT CUT OR WELD ON OR NEAR THIS CONTAINER**

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## SECTION 14 – TRANSPORT INFORMATION

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UN No. - 3352

IMDG - 6219

Packaging Class and Group – 6.1 and III

Label – Toxic M.P.

EMS No.- 6.1-02

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## SECTION 15 - MANUFACTURE'S / SUPPLIER'S DATA

**Name of Firm:** SWAL CORPORATION LIMITED

**Mailing:**

UNIPHOS HOUSE, MADHU PARK,  
KHAR (WEST), MUMBAI-400 52.,  
MAHARASHTRA (INDIA)

**Manufacturing Site**

UNITED PHOSPHORUS  
LIMITED,  
117, GIDC,  
Ankaleswhar Gujrat,- 393002

Tel. 0091 - 02646 – 50336

Fax 0091- 02646 –50297

Tel. 0091-22 - 2640 1111

Fax 0091-22- 2640 1010

Local Bodies Involved

Collector of Ankaleswhar  
Gujarat, India

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**SWAL CORPORATION LIMITED**

**GLYPHOSATE 41 SL**

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**SECTION 16 - DISCLAIMER**

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The Information contained in this material data sheet is believed to be reliable but no representation, guarantee or warranties, of any kind are made as to its accuracy, suitability for a particular application or results to be obtained from them. It is however ensured that the information contained in the material safety data sheet is relevant to the product manufactured / handled or sold as the case may be by us. **SWAL CORPORATION LIMITED**. makes no warranty expressed or implied in respect of the adequacy of this document for any particular purpose.

**Date: 14/09/2005**