



# Material Safety Data Sheet

## SECTION 1: IDENTIFICATION OF THE CHEMICAL PRODUCT

**Product Name:** SURIA 500 HERBICIDE

**Product Type:** Group M Herbicide/Amino acid derivative.

**Product Use:** For control of a wide range of annual and perennial weeds in a wide variety of situation as per the Direction for Use Table.

## SECTION 2: HAZARD IDENTIFICATION

### Statement of Hazardous Nature

This product is classified as: Hazardous according to the criteria of ASCC Australia.  
Not a Dangerous Good according to the Australian Dangerous Goods (ADG) Code.

**Risk Phrases:** R36/38. Irritating to eyes and skin.

**Safety Phrases:** S24/25. Avoid contact with skin and eyes.

**SUSDP Classification:** S5

**ADG Classification:** None allocated. Not a Dangerous Good.

**UN Number:** None allocated

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS	Proportion
Glyphosate, ( <i>isopropylamine salt</i> )	38641-94-0	67 %
Surfactant blend	-	< 12%
Water	7732-18-5	to 100%

Exposure limits have not been established by ASCC for these ingredients ie. No TWA or STEL limits set.

#### SECTION 4: FIRST AID MEASURES

**Inhalation:** Not usually a problem of poisoning. If in doubt, contact a Poisons Information Centre or a doctor. Remove to fresh air away from chemical source and treated plants.

**Skin Contact:** Wipe and soak away excess chemical. Wash thoroughly with water (use non-abrasive soap if necessary) for 20 minutes or until chemical is removed. Under fresh running water, remove contaminated clothing, shoes and leather goods (e.g. watchbands and belts). If irritation persists, repeat flushing and obtain medical advice.

**Eye Contact:** Wipe and soak away excess chemical. Immediately flush the contaminated eye(s) with lukewarm, flowing fresh water for 20 minutes until the product is removed, while holding the eyelid(s) open. Take care not to rinse contaminated water into the unaffected eye or onto the face.

**Ingestion - swallowing:** Not usually a problem of poisoning. If in doubt, contact a Poisons Information Centre or a doctor. DO NOT induce vomiting. Give plenty of water to drink and rinse mouth.

**Advice to Doctor:** Treatment is symptomatic.

#### SECTION 5: FIRE FIGHTING MEASURES

**Fire and Explosion Hazards:** There is no risk of an explosion from this product under normal circumstances if involved in a fire. Fire decomposition products from this product are likely to be irritating if inhaled. This product may decompose only after heating to dryness, followed by further strong heating.

**Extinguishing Media:** Not Combustible. Use extinguishing media suited to burning materials ie foam, dry powder, carbon dioxide or water spray.

**Fire Fighting:** When fighting fires involving significant quantities of this product, wear a splash suit complete with self contained breathing apparatus.

**Flash point:** Will not burn until water component is driven off.

**Upper Flammability Limit:** Does not burn. **Lower Flammability Limit:** Does not burn.

**Autoignition temperature:** Does not burn. **Flammability Class:** Does not burn.

#### SECTION 6: ACCIDENTAL RELEASE MEASURES

In the event of an accidental spill, control spill at source and prevent spillage from entering drains or water courses. Wear full protective clothing including face mask and face shield. All skin areas should be covered. Wear protective rubber or PVC gloves. Absorb onto sand, vermiculite or other suitable absorbent material. If spill is large or if absorbent material is not available create a barrier to stop material spreading and going into drains or waterways. Avoid using sawdust or other combustible material. Sweep up and pump recoverable product into labelled containers for salvage, and dispose of promptly at approved site.

After spill, wash area preventing runoff from entering drains or waterways. If significant quantity enters drains, advise emergency services and EPA.

#### SECTION 7: HANDLING AND STORAGE

Handle with care and keep exposure to this product to a minimum as practical. Ensure adequate ventilation whilst handling product.

Store in closed, original container in a well-ventilated shaded area. Keep container tightly closed when not in use. Keep container out of reach of children. **DO NOT** store for prolonged periods in direct sunlight.

Product is incompatible with strong oxidising agents, copper and zinc sulphate.

## SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure limits have not been established by ASCC for these ingredients ie. No TWA or STEL limits set. No biological limits applicable.

Ensure adequate ventilation and reduced dust in a shaded dry storage.

Personal Protective Equipment:

Australian Standards regarding safety clothing and equipment:

Respiratory equipment: **AS/NZS 1715**, Protective Gloves: **AS 2161**, Industrial Clothing: **AS2919**, Industrial Eye Protection: **AS1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS2210**

**Eyes:** Protective glasses or goggles should be worn when this product is being handled. Emergency eye wash facilities should be available where this product is being handled.

**Skin:** Prevent skin contact by wearing impervious gloves, clothes and, preferably overalls. Ensure all skin areas are covered.

**Inhalation:** Where product is being sprayed and a mist could be produced a respirator should be worn. It should be fitted with a type G cartridge, suitable for agricultural chemicals.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

**Physical Description & colour:** Clear yellow liquid.

**Odour:** Odourless to mild ammonical.

**Boiling Point:** Approximately 100°C at 100kPa.

**Freezing/Melting Point:** Approximately 0°C.

**Volatiles:** Water component.

**Vapour Pressure:** 2.4 kPa at 20°C (water vapour pressure).

**Vapour Density:** No data.

**Specific Gravity:** 1.22 @ 25°C

**Water Solubility:** soluble in water.

**pH:** approx 5

**Volatility:** No data.

**Odour Threshold:** No data.

**Evaporation Rate:** No data.

**Coeff Oil/water distribution:** No data

**Autoignition temp:** Does not burn

## SECTION 10: STABILITY AND REACTIVITY

**Chemical Stability:** Stable under normal temperatures and pressures

**Reactivity:** This product is unlikely to react or decompose under normal storage conditions.

**Conditions to Avoid:** Direct sunlight and lack of ventilation

**Incompatibilities:** strong oxidising agents.

**Hazardous Polymerization:** Hazardous polymerisation is not possible.

## SECTION 11: TOXICOLOGICAL INFORMATION

Glyphosate has very low toxicity by ingestion and skin contact with a reported acute oral LD50 of 5600 mg/kg in the rat and reported dermal LD50 values of greater than 5000 mg/kg for the acid and isopropylamine salt.

It is unlikely that glyphosate would produce reproductive effects in humans.

In a teratology study with rabbits, no developmental toxicity was observed in the fetuses at the highest dose tested (350 mg/kg/day). Glyphosate does not appear to be teratogenic.

Glyphosate mutagenicity and genotoxicity assays have been negative. These included the Ames test, other bacterial assays, and the Chinese Hamster Ovary (CHO) cell culture, rat bone marrow cell culture, and mouse dominant lethal assays. It appears that glyphosate is not mutagenic.

Rats given oral doses of up to 400 mg/kg/day did not show any signs of cancer, nor did dogs given oral doses of up to 500 mg/kg/day or mice fed glyphosate at doses of up to 4500 mg/kg/day. It appears that glyphosate is not carcinogenic.

Some microscopic liver and kidney changes, but no differences in function or toxic effects, have been seen after lifetime administration of glyphosate to test animals.

Glyphosate is poorly absorbed from the digestive tract and is largely excreted unchanged by mammals

Glyphosate has no significant potential to accumulate in animal tissue.

### **Toxicity Data:**

Acute oral LD50 for rats: 5600 mg/kg

Acute dermal LD50 for rabbits: > 5000 mg/kg

LC50 (96h) for Rainbow trout: 8.2 – 26 mg/L

LC50 (96h) for Bluegill sunfish: 5.8 – 14 mg/L

LD50 for bees: > 0.1 mg/kg

**Other Information:** The Australian Acceptable Daily Intake (ADI) for glyphosate for human is 0.3 mg/kg/day, set for the public daily, lifetime exposure. This is based on the NOEL of 30 mg/kg/day, the level determined to show no effects during long term exposure for the most sensitive indicators and the most sensitive species. (Ref: Comm. Dept. of Health and Ageing, 'ADI List', TGA, august 2003).

## SECTION 12: ECOLOGICAL INFORMATION Known Harmful Effects on the Environment

Glyphosate is moderately persistent in soil, with a estimated average half-life of 50 days. Field half-lives range from 1 to 175 days. It is strongly adsorbed to most soils, even those with lower organic and clay content. Even though it is highly soluble in water, field studies show it does not leach a lot and has low potential for runoff (except when adsorbed to soil matter). It has been estimated that less than 2% of the applied chemical goes to runoff. Soil microbes are responsible for the breakdown of the product and volatilization or photodegradation losses are negligible.

In water, glyphosate is strongly adsorbed to suspended organic and cationic mineral matter and is broken down by microorganisms. Its half-life in pond water ranges from 2 to 10 weeks.

Glyphosate is translocated throughout the plant, including to the roots. It is extensively metabolized in most plants.

Glyphosate may be slightly toxic to wild birds. The dietary LC50 in both mallards and bobwhite quail is greater than 4500 ppm.

There is a low potential for the compound to build up in the tissues of aquatic invertebrates or other aquatic organisms if poisoned.

Glyphosate is nontoxic to honeybees. Its oral and dermal LD50 is greater than 100 µg/ bee.

### SECTION 13: DISPOSAL CONSIDERATIONS

Instructions for the disposal of this product and its containers are listed on the product label.

For collection of unwanted rural chemicals, contact ChemClear ®1800 008 182 [www.chemclear.com.au](http://www.chemclear.com.au) and for help with the disposal of empty drums, contact DrumMuster® [www.drummuster.com.au](http://www.drummuster.com.au) for local and State contacts

### SECTION 14: TRANSPORT INFORMATION

**UN Number:** None allocated

**Proper Shipping Name:** None allocated

**SUSDP Classification:** S5

**ADG Class:** None allocated. Not a dangerous good.

**Hazchem Code:** None allocated

**Packaging Group:** None allocated

### SECTION 15: REGULATORY INFORMATION

**SUSDP: Schedule 5;** CAUTION KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING

**AICS (Australia):** All of the components in this product are listed on the Australian Inventory of Chemical Substances.

**APVMA Registration Number:** 63225

### SECTION 16: OTHER INFORMATION

**This MSDS contains only safety-related information sourced from the public domain and analytical results on this product:**

**Acronyms:**

**ADG Code** Australian Code for the Transport of Dangerous Goods by Road and Rail, 7th Edition

**AICS** Australian Inventory of Chemical Substances

**CAS number** Chemical Abstracts Service Registry Number

**Hazchem Number** Emergency action code of numbers and letters that provide information firefighters

**IARC** International Agency for Research on Cancer

**ASCC** Office of the Australian Safety and Compensation Council

**NTP** National Toxicology Program (USA)

**R-Phrase** Risk Phrase

**SUSDP** Standard for the Uniform Scheduling of Drugs & Poisons

**Product Name:** SURIA 500 HERBICIDE

**Issued:** June 2011; **Revision** June 2016

**Poisons Information Centre: 13 1126 from anywhere in Australia**

**UN Number** United Nations Number

**Police and Fire Brigade: Dial 000** **Poisons Information Centre (13 1126)**

**Emergency contact: 04 0214 9346 (24 hours)**

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