



MATERIAL SAFETY DATA SHEET

SUPRA 615 SL

1. IDENTIFICATION OF THE CHEMICAL PRODUCT AND COMPANY

Product Name : SUPRA 615 SL

Chemical description : Glyphosate: N-(phosphonomethyl)-glycine, isopropylamine salt
Non-Selective, Translocated Herbicide

Use : Herbicide.

Company identification :

PT. Nufarm Indonesia
Plaza Aminta Suite 802, 8th Floor
Jl. Letjend TB. Simatupang Kav. 10
Jakarta Selatan - 12310

Emergency phone : - Office Jakarta +62-21-75904844
- Plant +62-254-5750061

Email : plant.merak@id-nufarm.com

2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	Cas No	Proportion
Glyphosate Isopropylamine Salt	38641-94-0	51.05 %
Surfactant	secret	9.98 %
Inert Ingredient		to 100 %

3. HAZARDS IDENTIFICATION

Hazard Classification : Hazardous according to criteria of NOHSC Australia.

Risk Phrase(s) : R36/38 Irritating to eyes and skin

Safety Phrase(s) : S24/25 Avoid contact with skin and eyes.

SUSDP Classification : S5

ADG Classification : None allocated. Not a dangerous good.

UN Number : None allocated.

Emergency overview

Physical Description and colour : Clear blue liquid.

Odour : Slight ammoniacal odour.

Major Health Hazards : Glyphosate is practically nontoxic by ingestion, with a reported acute oral LD50 of 5600 mg/kg in the rat. The toxicities of the technical (glyphosate acid) and the formulated product are nearly the same. No major health hazards are known.

Potential Health Effects

Health Effects

Acute:

Swallowed : May cause gastrointestinal discomfort, nausea, vomiting and diarrhoea. If ingested large quantities of the undiluted product may result in hypotension and pulmonary oedema.

Eye : Cause irritation and conjunctivitis.

Skin : Cause irritation.

Inhaled : No adverse respiratory effects are anticipated.

Chronic:

Not available.

4. FIRST AID MEASURES

- Swallowed** : Rinse mouth with water. Give plenty of water to drink. Do NOT induce vomiting. Seek vomiting. Seek medical assistance.
- Eye** : Hold the eyes and flush immediately with plenty of water. Seek medical advice if irritation develops.
- Skin** : Remove contaminated clothing and wash affected areas or skin with soap and water. Seek medical advice if irritation develops.
- Inhaled** : Remove to fresh air, keep warm and at rest. Give artificial respiration or oxygen if breathing is shallow or stopped. Get medical attention immediately.
- Advice to Doctor** : Treatment is symptomatic.

5. FIRE FIGHTING MEASURES

Fire/Explosion Hazard
Dangerous decomposition or Combustion Products

Thermal decomposition : Not a fire or explosion hazard

Hazardous decomposition products : None known

Hazardous reactions : DO NOT mix, store or apply the product or spray solution of the product in galvanised steel or unlined steel (except stainless steel) containers or spray tanks. The product or spray solutions of the product react with such containers and tanks to produce hydrogen gas which may form a highly combustible gas mixture that can flash or explode if ignited by open flame, spark, welder's torch, lighted cigarette or other ignition source. Spray solutions of the product should be mixed, stored and applied only in stainless steel, aluminium, fibreglass, plastic and plastic-lined steel containers.



Extinguishing Media : Extinguish fire with foam, dry powder, carbon dioxide or water spray.

6. ACCIDENTAL RELEASE MEASURES

Spills and Disposal : Ensure suitable personal protection (including respiratory protection) during removal of spillage. Contain spill and absorb with sand or other absorbent material. Do not allow to enter drains, sewers and watercourses. Collect in sealed open top container for disposal. Triple rinse containers, add rinsings to spray tanks and send containers for recycling or if not recycling, break, crush or puncture and bury empty containers in a local authority landfill or in accordance with local, state or federal regulation. Do not dispose of undiluted chemicals on site.

7. HANDLING AND STORAGE

Handling (Personal) : Avoid breathing vapors or mist. Avoid breathing dust. Avoid contact with eyes, skin, or clothing. Washing thoroughly after handling this product.

Users Should : Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove personal protective equipment immediately after handling this product. Wash the outside of gloves before removing.

Storage : Store in the closed, original container in a well-ventilated area. Do not store for prolonged periods in direct sunlight

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Standards : None established for formulated product or its components

Engineering Controls : Well ventilated

Personal Protection : Avoid contact with eyes and skin. Do not inhale spray mist.

When preparing spray solution, wear PVC/rubber apron or cotton overalls buttoned to the neck and wrist, elbow-length PVC gloves and goggles or 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, face and contaminated clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	: Liquid
Colour	: Clear blue liquid
Odour	: Slight ammoniacal odour
Boiling point (°C)	: Not applicable
Vapour Pressure	: Not applicable
Specific Density	: 1.20 + 0.01
Flashpoint	: Non flammable
Flammability Limits	: Non flammable
Solubility in Water	: Completely soluble

10. STABILITY AND REACTIVITY

Chemical Stability : This product is unlikely to react or decompose under normal Storage conditions.

Conditions to Avoid : This product should be kept in a cool place, preferably below 30°C.

Incompatibilities : Strong oxidizing agents.

Hazardous Polymerization : Hazardous polymerisation is not possible.

11. TOXICOLOGICAL INFORMATION

Toxicity data

Glyphosate isopropylamine salt / technical

Acute oral LD50 for rat: 5600 mg/kg
Acute dermal LD50 for rabbits: >5000 mg/kg
LC50 (96 hr) for rainbow trout: 8.2 – 26 mg/L
LC50 (96 hr) for bluegill sunfish: 5.8 – 14 mg/L
LD50 for bees: > 0.1 mg/kg

12. ECOLOGICAL INFORMATION

- Known Harmful Effects on the Environment** : Harmful to fish and other aquatic organisms
- Other Precautions** : Do not spray in high winds. Do not contaminate dams, waterways or sewers with this product.
- Environ. Protection** : Glyphosate is a non-selective contact herbicide. Spray drift can cause damage.
- Persistence / Degradability** : Adsorption studies indicate that glyphosate has very low mobility. Average field half life of glyphosate is 47 days.
- Acute Toxicity Fish** : The following is data for a similar product.
LC50 (96 hr) for bluegill sunfish is 5.8 - 14 mg/l.
LC50 (96 hr) for rainbow trout is 8.2 - 26 mg/l.
LC50 (96 hr) for fathead minnow is 9.4 mg/l.
TL50 (96hr) carp is 19.7 ppm
- Acute Toxicity Other Organisms** : The following data is for the active ingredient, glyphosate.
Birds : Not toxic to birds. LD50 for bobwhite quail is >3850 mg/kg
Bees : Not toxic to bees. LD50 >100 µg/bee.

13. DISPOSAL CONSIDERATIONS

Disposal : Instructions concerning the disposal of this product and its containers are given on the product label.

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.

Packing Group: None allocated.

15. REGULATORY INFORMATION

SUSDP Classification : S5

Packaging & Labelling : CAUTION
KEEP OUT OF REACH OF CHILDREN
READ SAFETY DIRECTIONS BEFORE OPENING OR
USING

16. OTHER INFORMATION

This MSDS contains only safety-related information. For other data see product literature.