

Select[®] Herbicide**SECTION 1: CHEMICAL PRODUCT AND COMPANY INFORMATION**

Product Name: Select[®] Herbicide
Product Use: Herbicide
Company: Sumitomo Chemical Australia Pty Ltd
A.B.N. 21 081 096 255
Address: 501 Victoria Avenue Chatswood NSW 2067
Telephone Number: (02) 9904-6499 (Mon–Fri 8am–5pm EST)
Emergency Telephone Number: 1800 024 973 (24 hours) (EMERGENCIES ONLY)

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical entity	CAS number	Proportion
clethodim	99129-21-2	24% w/v
emulsifier	-	3% w/v
liquid hydrocarbon	64742-94-5	63% w/v

SECTION 3: HAZARDS IDENTIFICATION

Approved Criteria Classification: R20: HARMFUL BY INHALATION, R22: HARMFUL IF SWALLOWED, R65: HARMFUL – MAY CAUSE LUNG DAMAGE IF SWALLOWED
SUSDP Classification: S5
ADG Classification: Not classified as a Dangerous Good.

EMERGENCY OVERVIEW

- CAUSES SKIN AND EYE IRRITATION
- HARMFUL IF SWALLOWED, INHALED OR ABSORBED THROUGH THE SKIN
- ASPIRATION HAZARD, DO NOT INDUCE VOMITING
- AVOID BREATHING VAPOUR OR SPRAY MIST
- DO NOT GET IN EYES, ON SKIN OR ON CLOTHING
- KEEP OUT OF REACH OF CHILDREN

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POTENTIAL HEALTH EFFECTS

Acute Effects:

No adverse health effects are expected if Select Herbicide is handled in accordance with this Material Safety Data Sheet.

Swallowed:	Slightly toxic.
Eye:	Irritating to eyes. This product is a moderate eye irritant and could cause prolonged (weeks) impairment of your vision. The degree of the injury will depend on the amount of material that gets into the eye and the speed and thoroughness of the first aid treatment. Signs and symptoms may include pain, tears, swelling, redness and blurred vision.
Skin:	Mildly irritating to skin.
Inhaled:	Little inhalation hazard if used in the correct manner.

Chronic Effects:

This product contains clethodim. Compound-related effects, noted at high doses in subchronic toxicity studies conducted in mice, rats and dogs were decreased body weights, increased liver size (increased liver weights and hypertrophy) and anaemia (decreased haemoglobin, hematocrit or erythrocyte counts). In chronic studies with the mouse, rat and dog similar effects have been noted.

No reproductive toxicity has been observed; developmental toxicity was observed only at maternally toxic levels. Clethodim does not present any genetic hazard to intact animal systems.

This product contains a solvent mixture. Reports have associated repeated and prolonged occupational overexposures to solvents with permanent brain and nervous system damage. Symptoms reported include fatigue, concentration difficulties, anxiety, depression, rapid mood swings and short-term memory loss. Since many other diseases cause some or all of these symptoms, a doctor should be consulted if any appear. Overall, this product is not expected to be a chronic hazard when used according to the label directions.

SECTION 4: FIRST AID MEASURES

Scheduled Poisons:	If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 131126.
Inhalation:	Move person to fresh air. Seek medical attention.
Skin contact:	Remove contaminated clothing immediately. Wash thoroughly with large amounts of soap and water for 15-20 minutes. Seek medical attention.
Eye contact:	Hold eye open and wash slowly and gently with water for 15–20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Seek medical attention.
Ingestion:	If swallowed, do NOT induce vomiting. Give glass of water. Seek medical attention immediately.

Notes to doctor: Treat symptomatically. The main hazard is aspiration of the solvent into the lungs resulting in chemical pneumonitis.

SECTION 5: FIRE FIGHTING MEASURES

Fire and Explosion Hazards: Flash point: 62 – 65.6°C (Setaflash Closed Cup)
Autoignition: NDA

Extinguishing Media: Foam, carbon dioxide, dry chemical or water fog

Fire Fighting: Products from combustion of fires involving this material may be toxic. Avoid breathing smoke and mists. Avoid personnel and equipment contact with fallout and runoff. Minimise the amount of water used for fire fighting. Do not enter enclosed areas without full protective equipment, including self-contained breathing equipment. Contain and isolate runoff and debris for proper disposal. Decontaminate personal protective equipment and fire fighting equipment before reuse.

Hazard

Combustion Products: Normal combustion forms carbon dioxide, water vapour and may produce oxides of nitrogen. Combustion may produce toxic compounds of chlorine. Incomplete combustion can produce carbon monoxide.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Emergency Telephone Number: 1800 024 973 (24 hours) (EMERGENCIES ONLY)

Observe precautions in Section 8: Personal Protection

Stop the source of the spill if it is safe to do so. Contain the spill to prevent further contamination of the soil, surface water, or ground water.

FOR SPILLS ON LAND:

CONTAINMENT: Avoid runoff into storm sewers or other bodies of water. Contain spilled liquids with dry sorbents.

CLEANUP: Clean up spill immediately. Absorb spill with inert material (such as dry sand or earth), then place in a chemical waste container. Wash area with soap and water. Pick up wash liquid with additional absorbent and place in a chemical waste container.

Wash or wipe down protective equipment in detergent solution and dry. Wash overalls, destroy if heavily contaminated.

FOR SPILLS IN WATER:

CONTAINMENT: This material forms an emulsion in water. Stop or reduce contamination of any water. Isolate contaminated water.

CLEANUP: Remove contaminated water for treatment or disposal.

SECTION 7: HANDLING AND STORAGE

DO NOT USE OR STORE near flame, sparks or hot surfaces. Use only in well ventilated area. Keep container closed.

DO NOT weld, heat or drill container. Replace cap or bung. Emptied container still contains hazardous or explosive vapour or liquid.

Keep out of the reach of children. Keep pesticide in original container. Do not store or transport near food or feed. Do not contaminate food or feed. Do not put into food or drink containers. Do not dilute concentrate into food or drink containers. Store in a cool, dry place, out of direct sunlight.

Ensure containers are correctly labelled and securely sealed. Classified as a dangerous substance for transport purposes.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Standards

Threshold Limit Value (TLV) – 100ppm, 435 mg/m³ TWA ACGI (liquid hydrocarbon solvent).

Flammability

Flammable. Isolate from sources of heat, naked flames or sparks.

EYE PROTECTION: Do not get this material in your eyes. Eye contact can be avoided by wearing protective eyewear.

RESPIRATION/VENTILATION: This material may be a respiratory irritant and, unless ventilation is adequate, the use of approved respiratory protection is recommended.

SKIN PROTECTION: Do not get on skin or clothing. Skin contact should be minimised by wearing protective clothing including overalls worn over short-sleeved shirt and short pants, socks, chemical-resistant footwear and chemical resistant-gloves.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Amber liquid
ODOUR:	Mild aromatic odour.
MELTING POINT:	NA
BOILING POINT:	NDA
SPECIFIC GRAVITY:	0.95 g/mL @ 20°C
SOLUBILITY:	Emulsifiable in water
VAPOUR PRESSURE:	NA
pH:	3.6 as 5% emulsion
VISCOSITY:	NDA
CORROSION CHARACTERISTICS:	NDA

SECTION 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY: Unstable at extreme pH's, temperature and upon exposure to UV light.

INCOMPATIBILITY: May react with strong oxidising agents, such as chlorates, nitrates, peroxides etc.

IMPACT EXPLODABILITY: NDA

OXIDATION/REDUCTION PROPERTIES: NDA

SECTION 11: TOXICOLOGICAL INFORMATION

Acute (clethodim technical grade):

Oral LD ₅₀ rats:	male 1630 mg/kg female 1360 mg/kg
Dermal LD ₅₀ rabbit:	>5000 mg/kg
Rat 4-hour inhalation LC ₅₀ :	>3.9 mg/L
Skin Irritation:	Moderate irritation at 72 hours (rabbits). This material was not a skin sensitiser in the Buehler Guinea Pig Sensitisation Test.
Sensitisation:	
Rabbit Eye irritation:	Corneal involvement or irritation clearing in 7 days or less.

No product specific data is available. Based on ingredients this product is expected to be:

Eye irritation: This product is a moderate eye irritant and could cause prolonged (weeks) impairment of vision.

Skin irritation: Mildly irritating to skin.

Oral Toxicity: Slightly toxic when ingested.

Inhalation Toxicity: Respiratory irritant.

Subchronic Toxicity:

Studies with high doses of clethodim technical in mice, rats and dogs, indicated decreased body weights, increased liver size (increased liver weights and hypertrophy) and anaemia (decreased hemoglobin, hematocrit, or erythrocyte counts).

Chronic/Carcinogenicity:

In chronic studies with clethodim technical in the mouse, rat and dog, similar effects as seen in subchronic have been noted. No treatment related increases in neoplasms were observed in any study.

Teratology/Developmental Toxicity:

Developmental toxicity in rats and rabbits was observed only at maternally toxic dose levels of clethodim technical.

Reproduction Information:

No reproductive toxicity was observed in a study with rats exposed to clethodim technical for two generations.

Mutagenicity:

Clethodim technical does not present any genetic hazard to intact animal systems.

SECTION 12: ECOLOGICAL INFORMATION

Clethodim technical:**AVIAN TOXICITY:**

Acute dietary LC₅₀ to the mallard duck >6000 mg/kg
Acute oral LD₅₀ to the bobwhite quail >2000 mg/kg

AQUATIC ORGANISM TOXICITY:

Acute LC₅₀ (96 hour) to rainbow trout 67 mg/L
Acute LC₅₀ (96 hour) to bluegill sunfish 120 mg/L
Acute LC₅₀ (48 hour) to *Daphnia magna* 120 mg/L
Acute EC₅₀ (5 days) for fresh water algae 57.8 mg/L

OTHER NON-TARGET ORGANISMS:

Acute LC₅₀ to the earthworm 454 mg/kg
Acute contact LD₅₀ to bee >100 µg/bee

Protection of Wildlife, Fish, Crustacea and Environment

Do NOT contaminate ponds, waterways, irrigation channels or drains with Select Herbicide or used containers.

SECTION 13: DISPOSAL CONSIDERATIONS

For end users, triple or (preferably) pressure rinse containers before disposal. Add rinsings to the spray tank. Do NOT dispose of undiluted chemicals on-site. Puncture, or shred and bury empty containers in a local authority landfill. If not available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose, clear of waterways, desirable vegetation and tree roots. Empty containers and product should NOT be burnt.

Clear area of all unprotected personnel. Wear full protective equipment including breathing apparatus. Stop leak if safe to do so by manoeuvring the container. Decant leaking container into a clean empty drum remote from the storage area and label. If the leaking container can be repacked, contact Sumitomo Chemical Australia Pty Ltd so that an overdrum and transport for return to a nominated Sumitomo location can be arranged.

SECTION 14: TRANSPORT INFORMATION

Classification according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code):

ADG Code: NA

HAZCHEM Code: NA

Dangerous Goods / Hazardous Substances Regulation

This product is subject to the following regulations:

- Australia Code for the Transport of Dangerous Goods by Road and Rail
- State/Territory Storage of Dangerous Goods Regulations
- State/Territory Hazard Substances Regulations
- Standard for the Uniform Scheduling of Drugs and Poisons

SECTION 15: REGULATORY INFORMATION

This product is registered by the Australian Pesticides and Veterinary Medicines Authority.

SECTION 16: OTHER INFORMATION

Revision date: 16-11-2004

Revision number: 3

NA Not Applicable

NDA No Data Available

THE INFORMATION GIVEN IN THIS MSDS IS BASED ONM DATA AVAILABLE TO US AS OF THE REVISION DATE GIVEN HEREIN, AND BELIEVED TO BE CORRECT. CONTACT SUMITOMO CHEMCIAL AUSTRALIA TO CONFIRM IF YOU HAVE THE MOST CURRENT MSDS.