

Status[®] Herbicide**SECTION 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER**

Product Name: Status[®] Herbicide
Other Names: None
Recommended 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)
Website: www.sumitomo-chem.com.au

SECTION 2: HAZARDS IDENTIFICATION

Hazard Classification: Hazardous according to the criteria of the Australian Safety and Compensation Council (ASCC).
Risk Phrases: Xn:
R20 – Harmful by inhalation.
R22 – Harmful if swallowed.
R65 – Harmful: may cause lung damage if swallowed.
N:
R52 – Harmful to aquatic organism.
Safety Phrases: S23 – Do not breathe fumes/vapour/spray.
S24 – Avoid contact with skin.
S25 – Avoid contact with eyes.
SUSDP Classification (Poison Scheduling): S5
ADG Classification: Not classified as a Dangerous Good for transport via road and rail.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Identity	CAS number	Proportion
Clethodim	99129-21-2	24%
Liquid hydrocarbon	64742-94-5	66.5%
Other ingredients determined as non hazardous	-	to 100%

SECTION 4: FIRST AID MEASURES

If poisoning occurs, immediately contact a doctor or Poisons Information Centre (Phone Australia 131126; New Zealand 0800 764 766), and follow the advice given. Show this Material Safety Data Sheet to a doctor.

General: In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).
Swallowed: If swallowed, do not induce vomiting. Wash mouth with water. Give water to drink. Seek medical advice.
Skin contact: If on skin, remove contaminated clothing and wash skin thoroughly with soap and water. Launder contaminated clothing before re-use. Seek medical advice if irritation develops.

Eye contact:	If in eyes, hold eyes open and flood with water for at least 15 minutes and seek medical advice.
Inhalation:	If affected, remove from contaminated area to fresh air. If any signs or symptoms occur or persist, seek medical advice.
Note to physician:	Apply basic aid and decontamination procedures. Treat symptomatically.

SECTION 5: FIRE FIGHTING MEASURES

Flashpoint:	63.0 – 65.0°C (Pensky-Martens Closed Cup)
Flammable limits:	NDA
Auto-ignition temperature:	NDA
Suitable Extinguishing Media:	Small fire: Dry chemical, carbon dioxide. Large fire: Use water spray, foam – Do not use water jets.
Hazards from Combustion Products:	May emit toxic and irritating fumes under fire conditions. Normal combustion forms carbon dioxide, water vapour and may produce oxides of nitrogen and sulphur. Combustion may produce toxic compounds of chlorine. Incomplete combustion can produce carbon monoxide.
Precautions for Fire Fighting and Special Protective Equipment:	Ensure respiratory equipment is available. Evacuate immediate area. Advise Fire Brigade of nature of hazard. Wear full protective equipment, including breathing apparatus. Remove containers from site, if possible, as overheating may cause the containers to explode. Surrounding containers should be cooled using a fine water spray. All run-off must be contained.
Hazchem Code:	NA

SECTION 6: ACCIDENTAL RELEASE MEASURES

Emergency Telephone Number:	1800 024 973 (24 hours)	(EMERGENCIES ONLY)
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METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN UP PROCEDURES

SPILLS

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. Wear personal protective equipment as specified in Section 8. Do not allow material to enter sewers or bodies of water.

Small Spills: (Liquid spill)	Apply absorbent inert material such as soil, dry sand or vermiculite to the spill area. Sweep up material when absorption is complete and contain in a refuse vessel for disposal. If necessary, wash the spill area with an alkali detergent and water and absorb and contain as above.
Large Spills: (Liquid Spill)	Place leaking containers into salvage drums. Apply absorbent inert material such as soil, dry sand or vermiculite to the spill area. Form a barricade around spill and in front of drains or waterways in spill vicinity, using soil or other non reactive material. Sweep up material and contain in a refuse vessel for disposal. Contact emergency services as required.
Spills in Water:	This material forms an emulsion in water. Stop or reduce contamination of any water. Isolate contaminated water. Remove contaminated water for treatment or disposal.
Disposal:	Contaminated material must be disposed of in accordance with all State and/or Local regulations.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling: 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. Perfectly ground the equipment to avoid charging static electricity.

Keep out of reach of children, unauthorised persons and animals. After handling and before eating, drinking or smoking wash hands, arms and face thoroughly with soap and water. For personal protection see Section 8.

Conditions for Safe Storage: Keep out of reach of children, unauthorised persons and animals. Store in the closed, original container in a dry, cool, well-ventilated area, out of direct sunlight. Protect from frost. Do not store near food, feedstuffs, fertiliser or seed. Store at ambient temperatures.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

NATIONAL EXPOSURE STANDARDS

Exposure standards represent the air borne concentrations of individual chemical substances, which according to current knowledge, should neither impair the health of, nor cause undue discomfort to, nearly all workers. A time weighted average (TWA) concentration for an 8 hour day, and 5 day week has not been established by the Australian Safety and Compensation Council (ASCC) for any of the major ingredients in this product. Hence, there is no exposure standard allocated to this product.

BIOLOGICAL LIMIT VALUES

No Biological Limit Allocated.

ENGINEERING CONTROLS

No engineering control measures are allocated to the use of this product, however always use in a well ventilated area. Do not inhale fumes / vapour / spray.

PERSONAL PROTECTIVE EQUIPMENT

This product may be a respiratory irritant. Use only in well ventilated areas.

Harmful if swallowed. Will irritate the eyes and skin. When preparing spray and using the prepared spray, wear cotton overalls buttoned to the neck and wrist, washable hat, elbow-length PVC gloves and face shield or goggles. If product in eyes, wash it out immediately with water. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves, face shield or goggles and contaminated clothing.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (Product Specific)

Appearance:	Clear amber liquid.
Odour:	Kerosene-like odour.
pH:	4.1 as 1% emulsion
Vapour Pressure:	NDA
Vapour Density:	NDA
Boiling Point:	NA
Melting Point:	NA
Solubility:	Emulsifiable in water.
Specific Gravity:	0.96 g/mL @ 20°C
Viscosity:	3.35 @ 20°C
Flashpoint:	63.0 – 65.0°C (Pensky-Martens Closed Cup)
Explosive Limits:	NDA
Ignition Temperature:	NDA

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability:	Stable under recommended storage and handling conditions. (See Section 7). Unstable at extreme pH's, temperature and upon exposure to UV light.
Conditions to Avoid:	Avoid direct sunlight. Isolate from sources of heat, naked flames or sparks.
Incompatible Materials:	Strong oxidising agents such as chlorates, nitrates, peroxides etc. Organic peroxide, strong acids or bases.
Hazardous Decomposition Products:	Emits toxic fumes under fire conditions (See also Section 5).
Hazardous Reactions:	No known hazardous reactions.

SECTION 11: TOXICOLOGICAL INFORMATION

ACUTE HEALTH EFFECTS (Formulated Product)

Toxicology

Swallowed:	LOW TOXICITY. (LD ₅₀ (female rat) = 3200 mg/kg) Accidental ingestion of small amounts is not expected to be harmful.
Skin:	NOT HARMFUL. (LD ₅₀ (rat) > 5000 mg/kg)
Inhalation:	MODERATELY TOXIC. (EC ₅₀ rat (4 hour) > 5.05 mg/L) Inhalation of vapour may be harmful.

Irritation

Skin:	MODERATE IRRITANT. Moderate irritation at 72 hours (rabbits).
Eye:	MODERATE IRRITANT. Rabbit eye irritation: corneal involvement or irritation clearing in 7 days or less.

Sensitisation

Skin:	MAY CAUSE SENSITISATION BY SKIN CONTACT.
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CHRONIC HEALTH EFFECTS (Formulated Product)

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.

SUBCHRONIC TOXICITY (Active Ingredient)

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 haemoglobin, hematocrit or erythrocyte counts).

CHRONIC / CARCINOGENICITY (Active Ingredient)

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.

OTHER TOXICOLOGICAL INFORMATION (Active Ingredient)

Teratology / Developmental Toxicity

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

Reproductive 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

DO NOT contaminate streams, rivers or waterways with the chemical or used containers.

ECOTOXICITY (Active Ingredient)

Low toxicity to slightly toxic to fish:	LC ₅₀ Rainbow trout (96 hour) = 67 mg/L LC ₅₀ Bluegill sunfish (96 hour) = 120 mg/L
Low toxicity to aquatic invertebrates:	LC ₅₀ <i>Daphnia magna</i> (48 hour) > 120 mg/L
Slightly toxic to algae:	EC ₅₀ Fresh water algae (5 days) = 57.8 mg/L
Low toxicity to birds:	Dietary LC ₅₀ Mallard duck > 6000 mg/kg Oral LD ₅₀ Bobwhite quail > 2000 mg/kg
Low toxicity to bees:	LD ₅₀ Adult worker bees (acute contact) > 100 µg/bee

ENVIRONMENTAL FATE (Active Ingredient)

(half life and mobility)

Clethodim is of low persistence in most soils with a reported half-life of approximately 3 days. Breakdown is mainly by aerobic processes, although photolysis may make some contribution. The main breakdown products in soils under aerobic conditions are sulfoxide, sulfone and oxazole sulfone.

Clethodim and these degradates are weakly bound to soils, with reported soil K_d (soil-water partition coefficient unadjusted for soil organic matter) values of 0.05 and 0.23 over a range of five soils. Thus, while it may be somewhat mobile in the soil environment, it is very short-lived.

SECTION 13: DISPOSAL CONSIDERATIONS

Product:	This material must be disposed of as a hazardous waste. Disposal should be in accordance with local, national or state regulations.
Contaminated Packaging:	Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. Do NOT dispose of undiluted chemicals on-site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush or puncture 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.

SECTION 14: TRANSPORT INFORMATION

No special storage or transport requirements necessary.

Rail / Road (ADR / RID)	Classified as not dangerous in the meaning of railroad transport regulations.
<i>Proper Shipping Name</i>	NA
<i>Class:</i>	NA
<i>Sub Risk Class</i>	NA
<i>UN Number</i>	NA
<i>Hazchem Code</i>	NA
<i>Packing Group</i>	NA
Sea (IMDG Code)	Classified as not dangerous in the meaning of sea transport regulations.
<i>Proper Shipping Name</i>	NA
<i>Class:</i>	NA
<i>Sub Risk Class</i>	NA
<i>UN Number</i>	NA
<i>Hazchem Code</i>	NA
<i>Packing Group</i>	NA
Air (ICAO / IATA)	Classified as not dangerous in the meaning of air transport regulations.
<i>Proper Shipping Name</i>	NA
<i>Class:</i>	NA
<i>Sub Risk Class</i>	NA
<i>UN Number</i>	NA
<i>Hazchem Code</i>	NA
<i>Packing Group</i>	NA

SECTION 15: REGULATORY INFORMATION

Registration Status:	This product is currently registered under the Australian Pesticides and Veterinary Medicines Authority (APVMA) with the following approval number 61778.
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SECTION 16: OTHER INFORMATION

Abbreviations:

NA	Not Applicable
NDA	No Data Available

Revision Date:	3 March 2009
Revision Number:	2

THE INFORMATION GIVEN IN THIS MSDS IS BASED ON DATA AVAILABLE AS OF THE REVISION DATE GIVEN HEREIN, AND BELIEVED TO BE CORRECT. EACH USER SHOULD READ THIS MSDS AND CONSIDER THE INFORMATION IN THE CONTEXT OF HOW THE PRODUCT WILL BE HANDLED AND USED IN THE WORKPLACE INCLUDING IN CONJUNCTION WITH OTHER PRODUCTS. IF CLARIFICATION OR FURTHER INFORMATION IS NEEDED TO ENSURE THAT AN APPROPRIATE RISK ASSESSMENT CAN BE MADE, THE USER SHOULD CONTACT THIS COMPANY.