

SAFETY DATA SHEET

SECTION 1

IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: **Apparent Chainsaw 250 Herbicide**

Other Names: Hexazinone, Group C Herbicide.
Use: Herbicide for plantations, pastures, commercial and industrial areas.
Company: Apparent Pty Ltd
Address: Suite G.08, 762 Toorak Road, Hawthorn East, Vic. 3123.
PO Box 3092, Cotham PO, Kew, Vic 3101
ACN/ABN: 143 724 136
Telephone Number: 03 9822 1321
Email: enquiries@apparentag.com.au
Emergency Contact: 0411 227 338

SECTION 2

HAZARDS IDENTIFICATION

**Classified as hazardous according to criteria of Safe Work Australia.
Classified as a Dangerous Good according to the ADG Code.**

GHS classification of the substance/mixture

Flammable Liquids: Category 2.
Eye Damage/Irritation Category 2B.
Hazardous to the Aquatic Environment – Acute Hazard: Category 1.
Hazardous to the Aquatic Environment – Long-Term Hazard: Category 1.

Signal Word: DANGER.

Hazard statements:

H225 Highly flammable liquid and vapour.
H320 Causes eye irritation.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements:

Prevention:

P210 Keep away from heat/sparks/open flames/hot surfaces: - No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ventilating/lighting and equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P264 Wash hands, arms and face thoroughly after handling.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response:

P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing.
Rinse skin with water/shower.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P 313 If eye irritation persists: Get medical advice/attention.
P370 + P378 In case of fire: Use foam blanket, carbon dioxide or dry agent for extinction.
P391 Collect spillage.

Storage:

P403 + P235 Store in a well-ventilated place. Keep cool.

SECTION 2 HAZARDS IDENTIFICATION (Continued)*Disposal:*

P501 Dispose of contents/container in accordance with national regulations.

Pictograms:**SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS****Ingredients:**

CHEMICAL	CAS NUMBER	PROPORTION
Hexazinone	51235-04-2	250 g/L
Ethanol mixture	64-17-5	30-60%
Other ingredients (including water) determined not to be hazardous		Balance

SECTION 4 FIRST AID MEASURES**FIRST AID**

Ingestion: If poisoning occurs, contact a Doctor or Poisons Information Centre. Phone 131 126. Wash mouth with water and give water to drink. Do NOT induce vomiting.

Eye contact: If in eyes, immediately hold eyes open and flood with clean water until chemical is removed. Ensure irrigation under eyelids by occasionally lifting them. Do not try to remove contact lenses unless trained. If irritation persists, seek medical advice.

Skin contact: Wash affected skin with soap and water. Remove contaminated clothing. If skin irritation persists, re-wash area and seek medical advice. Launder contaminated clothing before re-use.

Inhalation: Remove to fresh air and observe until recovered. If effects persist, seek medical advice.

Advice to Doctor: Treat symptomatically.

SECTION 5 FIRE FIGHTING MEASURES

Specific Hazard: Product is flammable. Flash point 23-25°C. Flammable liquid vapours may form explosive mixtures with air.

Extinguishing media: Extinguish fire using foam blanket, carbon dioxide or dry agent. If not available, use waterfog or fine water spray but ensure all runoff is contained.

Hazards from combustion products: Product will decompose when burnt and will emit toxic fumes including oxides of carbon and nitrogen. Eruption of containers is likely if confined at high temperatures. Intact containers exposed to excessive heat should be cooled with water to reduce drum pressure.

Small fires: If area is heavily exposed to fire and if conditions permit, consider letting the fire burn itself out since water may increase the area contaminated. Cool containers / tanks with water spray.

Precautions for fire-fighters and special protective equipment: Isolate fire area. Evacuate downwind residents. Wear full protective clothing and self contained breathing apparatus. Do not breathe smoke or vapours generated.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Emergency procedures: In the event of a major spill, prevent spillage from entering drains or water courses. As a minimum, wear elbow-length PVC gloves and face shield or goggles. In the case of spillage, stop leak if safe to do so, and contain spill. Prevent spillage entering drains or watercourses. Contain and absorb spilled material with absorbent material such as sand, clay, cat litter or material such as vermiculite. Collect recoverable product for use as labelled on the product. Vacuum, shovel or pump contaminated spilled material into an approved container and dispose of waste as per the requirements of Local or State Waste Management Authorities. Keep out animals and unprotected persons.

SECTION 6 ACCIDENTAL RELEASE MEASURES (Continued)

Material and methods for containment and cleanup procedures: To clean spill area, tools and equipment, wash with a solution of soap, water and acetic acid/vinegar. Follow this with a neutralisation step of washing the area with a bleach or caustic soda ash solution. Finally, wash with a strong soap and water solution. Absorb, as above, any excess liquid and add both solutions to the drums of waste already collected.

SECTION 7 HANDLING AND STORAGE

Precautions for Safe Handling: No smoking, eating or drinking should be allowed where material is used or stored. Will irritate the eyes and skin. Avoid contact with the eyes and skin. DO NOT inhale spray mist. When opening the container, preparing the spray and using the prepared spray, wear elbow-length PVC gloves and face shield or goggles. If product on skin, immediately wash the area with soap and 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 contaminated clothing, gloves and face shield or goggles.

Conditions for Safe Storage: DO NOT use or store at temperatures of 0°C, or below, as the product will freeze. Store in the closed, original container, in a dry, cool, well-ventilated area. DO NOT store for prolonged periods in direct sunlight. This product is classified as a Dangerous Good - Flammable liquid. Do not re-use container for any purpose.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines:

Exposure guidelines have not been established for this product by Safe Work Australia, however ethanol is an ingredient in this product and has the following guideline.

Atmospheric Contaminant	Exposure Standard (TWA)	STEL (mg/m ³)
Ethanol	1880 mg/m ³ (1000 ppm)	-

Biological Limit Values:

No biological limit allocated.

Engineering controls:

Keep containers closed when not in use. No special engineering controls are generally required, however ensure adequate ventilation in the work environment.

Personal Protective equipment (PPE):

When opening the container, preparing the spray and using the prepared spray, wear elbow-length PVC gloves and face shield or goggles. If product on skin, immediately wash the area with soap and 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 contaminated clothing, gloves and face shield or goggles.

Personal Hygiene: Will irritate the eyes and skin. Avoid contact with the eyes and skin. DO NOT inhale spray mist. Clean water should be available for washing in case of eye or skin contamination. Wash skin before eating, drinking or smoking. Shower at the end of the workday.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Light yellow liquid.
Odour:	Alcohol-like odour.
Boiling point:	No data available.
Freezing point:	No data available – solid at room temperature.
Specific gravity:	Approximately 0.9 g/mL.
Solubility in Water:	Miscible.
pH:	No data available.
Flammability:	Flammable liquid.
Flashpoint (°C):	23-25°C.
Poisons Schedule:	This product is a schedule 5 (S5) poison.
Formulation type:	Soluble Concentrate (SL).

SECTION 10**STABILITY AND REACTIVITY**

Chemical Stability: Product is considered stable in ambient conditions for a period of at least 2 years after manufacture.

Conditions to avoid: Do not store for prolonged periods in direct sunlight. Avoid sources of ignition.

Incompatible materials: Hydrolyses in the presence of strong acids and bases.

Hazardous decomposition products: If burned it will produce oxides of carbon and nitrogen and other toxic fumes.

Hazardous reactions: Polymerisation will not occur.

SECTION 11**TOXICOLOGICAL INFORMATION**

No specific data is available for this product as no toxicity tests have been conducted on this product. Information presented is our best judgement based on similar products and/or individual components. As with all products for which limited data is available, caution must be exercised through the use of protective equipment and handling procedures to minimise exposure.

Potential Health Effects:**ACUTE EFFECTS**

Swallowed: Low acute toxicity. Acute Oral LD₅₀ > 4,000 mg/kg.

Eye: This product will irritate the eyes. Avoid contact with eyes.

Skin: This product may be a slight irritant to the skin. Acute dermal LD₅₀ > 5,000 mg/kg.

Inhaled: Inhalation of mists or sprays may produce respiratory irritation. The estimated LC₅₀ is > 5 mg/L/4 hours.

Long Term Exposure:

Chronic toxicity: Over a 2-week period, male rats receiving dietary doses of 300 mg/kg/day showed no evidence of cumulative toxicity. Male rats receiving doses of 50 mg/kg/day over 90 days showed no effects, but higher doses caused decreased body weights. Body weight gain was seen in dogs at doses of about 35 mg/kg/day and higher over 1 year.

Reproductive effects: Female rats, fed moderate to high doses (up to 150 mg/kg) over two generations, showed no effects on reproduction or milk production, but only reduced offspring weight. Available evidence suggests that hexazinone is unlikely to cause reproductive effects in humans.

Teratogenic effects: Pregnant female rats receiving doses up to 100 mg/kg/day during gestation, and rabbits receiving up to 125 mg/kg/day, evidenced no foetal abnormalities. Teratogenic effects were observed in rats only at maternal doses greater than 400 mg/kg/day during gestation. It is unlikely that hexazinone would pose a teratogenic effect in humans under normal conditions.

Mutagenic effects: Hexazinone showed no mutagenic activity in the Ames assay and tests using Chinese hamster ovary cell cultures. In living animal tests, no changes in chromosomal structure occurred. In other laboratory analyses of its capacity to induce genetic disruption, results were inconclusive. The evidence suggests hexazinone is either slightly or non-mutagenic.

Carcinogenic effects: Rats, mice, and dogs have been tested for 1 to 2 years on diets containing up to 500 mg/kg. Hexazinone was not carcinogenic in rats, and was only carcinogenic in mice at dietary levels of over 300 mg/kg. At these levels in mice, liver adenomas were observed. These studies suggest that hexazinone is unlikely to be carcinogenic to humans under normal circumstances.

Organ toxicity: Target organs affected in lab animals by chronic hexazinone exposure include the liver.

SECTION 12**ECOLOGICAL INFORMATION**

Environmental Toxicology: No information is available for the product. The following information refers to the active ingredient, Hexazinone. Hexazinone is slightly to practically nontoxic to birds. The acute oral LD₅₀ of hexazinone in bobwhite quail is 2258 mg/kg. The 5- to 8-day dietary LC₅₀ in bobwhite quail and mallard ducklings is greater than 10,000 ppm. Hexazinone is slightly toxic to fish and other freshwater organisms. Some of the reported 96-hour LC₅₀ values include: Rainbow trout, 320 mg/L; Bluegill, 370 mg/L; Fathead minnow, 274 mg/L.

SECTION 12 **ECOLOGICAL INFORMATION (Continued)**

The 48-hour LC₅₀ for hexazinone in the water flea, *Daphnia magna*, is 151 mg/L. The bioconcentration factor in bluegill sunfish is only seven times the ambient water concentration, indicating very low bioaccumulation in fish. Hexazinone is nontoxic to honey bees.

Environmental Fate:

Hexazinone is of moderate to high persistence in the soil environment. Measured field half-lives range from less than 30 to 180 days, with a representative value of about 90 days. Hexazinone is broken down by soil microbes, which release carbon dioxide in the process. Sunlight may also break down the compound via photodegradation. The rate of breakdown under natural field conditions will depend on many site-specific variables, including sunlight, rainfall, soil type, and rate of application. Hexazinone does not evaporate to any appreciable extent from soil. Hexazinone is very poorly adsorbed to soil particles, very soluble in water, and slowly degraded, so it is likely to be mobile in most soils and has the potential to contaminate groundwater. *Breakdown in water:* Photodecomposition, biodegradation, and dilution are the prime mechanisms for loss of hexazinone activity in aquatic systems. *Breakdown in vegetation:* Hexazinone is readily absorbed in the root zone and translocated throughout the plant. It is less mobile following uptake from the foliage. It is converted in non-susceptible plants to less phytotoxic compounds. In susceptible plants, it is more persistent and can result in disruption of photosynthesis and chloroplast damage.

SECTION 13**DISPOSAL CONSIDERATIONS**

Spills and Disposal: Persons involved in cleanup require adequate skin protection - see section 8. Keep material out of streams and sewers. Vacuum, shovel or pump waste into an approved drum. Dispose of drummed wastes, including decontamination solution in accordance with the requirements of Local or State Waste Management Authorities. In rural areas contact ChemClear <http://www.chemclear.com.au> for help with collection of unwanted rural chemicals.

Disposal of empty containers: DO NOT RE-USE CONTAINER. Triple-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 deliver empty packaging to an approved waste management facility. If an approved waste management facility is not available, bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose, clear of waterways, desirable vegetation and tree roots, in compliance with relevant local, state or territory government regulations. Do not burn empty containers or product.

For help with disposal of empty containers contact DrumMuster <http://www.drummuster.com.au> for details for your area.

EXPLOSION WARNING: "EMPTY" containers may contain liquid and/or vapour residue which can be explosive if exposed to an ignition source at temperatures above 23°C. Such conditions may occur during cutting or welding. DO NOT cut or weld these containers.

SECTION 14**TRANSPORT INFORMATION**

Transport: Apparent Chainsaw 250 Herbicide is classified as a Dangerous Goods. The following Dangerous Goods Classification applies:-

UN 1170, Class 3 (Flammable liquid), Packing Group III, Proper Shipping Name ETHANOL SOLUTION. Hazchem code ●2Y. Hazard Identification Number (HIN) 30. Australian Standards Initial Emergency Response Guide No. 14.

SECTION 15**REGULATORY INFORMATION**

Under the Standard for Uniform Scheduling of Medicines and Poisons (SUSMP), this product is a Schedule 5 poison.

This product is registered under the Agricultural and Veterinary Chemicals Code Act 1994. Product Registration No. 70089.

This product is classified as a Hazardous Substance under the criteria of Safe Work Australia.

SECTION 15 REGULATORY INFORMATION (Continued)

This product is classified as a Dangerous Good by the ADG Code, International Maritime Dangerous Goods (IMDG) Code and the International Air Transport Association (IATA).

Requirements concerning special training:

Check State or Territory regulations that require people who use pesticides in their job or business to have training in the application of the materials.

SECTION 16 OTHER INFORMATION

Issue Date: 22 November 2016. Valid for 5 years till 22 November 2021. (Correcting typographical errors).

Key to abbreviations and acronyms used in this SDS:

ADG Code:	Australian Dangerous Goods Code (for the transport of dangerous goods by Road and Rail).
Carcinogen:	An agent which is responsible for the formation of a cancer.
Combustible Liquid:	Liquids that ignite with a flash point greater than 60°C.
Flammable Liquid:	Liquids that ignite with a flash point less than 60°C.
Genotoxic:	Capable of causing damage to genetic material, such as DNA.
HSIS:	Hazardous Substances Information System.
Lacrimation:	The production, secretion, and shedding of tears.
Lavage:	A general term referring to cleaning or rinsing.
Mutagen:	An agent capable of producing a mutation.
Pneumonitis:	A general term that refers to inflammation of lung tissue.
PPE:	Personal protective equipment.
Teratogen:	An agent capable of causing abnormalities in a developing foetus.
TWA:	The Time Weighted Average airborne concentration over an eight-hour working day, for a five day working week over an entire working life.
Safe Work Australia:	Formally known as Australian Safety & Compensation Council (ASCC) which was formally known as the National Occupational Health & Safety Commission (NOHSC).

References

1. "Search Hazardous Substances". HSIS. Safe Work Australia website. (2016).
2. "Approved Criteria for Classifying Hazardous Substances" 3rd Ed. NOHSC Australia. [NOHSC:1008 (2004)]. October 2004.
3. Globally Harmonized System of Classification and Labelling of Chemicals (GHS). United Nations, 2009.

This SDS summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this SDS 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.

End SDS