



SAFETY DATA SHEET

SECTION 1

IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: Apparent Fireball 400 Herbicide

Other Names: Fluroxypyr, Group 4 Herbicide.
Use: An agricultural broadleaf weed herbicide.
Company: AIRR Apparent Pty Ltd
Address: 15/16 Princes Street, Newport NSW 2106.
Phone Number: 03 5820 8400
Email: enquiries@apparentag.cm.au
Emergency Contact: 0437 303 689

SECTION 2

HAZARDS IDENTIFICATION

**Classified as hazardous according to criteria of Safe Work Australia.
Not classified as a Dangerous Good according to the ADG Code*.
Combustible Liquid (C1).**

* Not subjected to the ADG code when transported in Australia by Road or Rail in packages 500 kg (L) or less; or in IBC's (refer to SP AU01). However, if transported by Air or Sea, this provision does not apply. Then the product is classed as a Dangerous Good (Class 9 Environmentally Hazardous) by IATA and IMDG respectively. See Section 14 of this SDS for details.

Globally Harmonised System (GHS) classification of the substance/mixture:

Flammable Liquids – Hazard Category 4.
Aspiration Hazard – Hazard Category 1.
Eye damage/irritation – Hazard Category 2A.
Specific Target Organ Toxicity (single exposure) – Hazard Category 3.
Reproductive Toxicity – Hazard Category 1.
Hazardous to the Aquatic Environment – Long-Term (chronic) Hazard – Hazard Category 1.

Signal Word: DANGER.

Hazard Statements:

H227 Combustible liquid.
H304 May be fatal if swallowed and enters airways.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H360 May damage fertility or the unborn child.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements:

Prevention:

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.
P261 Avoid breathing mist, vapours or spray.
P264 Wash hands, arms and face thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection/ hearing protection.

Response:

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor.

SECTION 2 HAZARDS IDENTIFICATION (Continued)**Response - Cont:**

P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313	IF exposed or concerned: Get medical advice/ attention.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P321	Specific treatment see Safety Directions on product label.
P331	Do NOT induce vomiting.
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.
P370 + P378	In case of fire: Use carbon dioxide, foam or dry agent for extinction.
P391	Collect spillage.

Storage:

P405	Store locked up.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.

Disposal:

P501	Dispose of contents/container in accordance with national regulations.
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Pictogram:**SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS****Ingredients:**

CHEMICAL	CAS NUMBER	PROPORTION
Fluroxypyr-meptyl	81406-37-3	400 g/L
Hydrocarbon solvent	64742-94-5	316 g/L
N-methyl-2-pyrrolidone	870-50-4	100 g/L
Emulsifiers	Mixture	5-10%
Other ingredients (including water) determined not to be hazardous		Balance

SECTION 4 FIRST AID MEASURES**FIRST AID**

Ingestion:	If swallowed do NOT induce vomiting. Rinse mouth with water and give water to drink. If poisoning occurs, contact a Doctor or Poisons Information Centre. Phone 131 126.
Eye contact:	Immediately hold eyes open and flood with plenty of clean water. Ensure irrigation under eyelids by occasionally lifting them. Do not try to remove contact lenses unless trained. If irritation occurs and persists, seek medical advice.
Skin contact:	Immediately remove contaminated clothing and wash skin with soap and water. If skin irritation persists, seek medical advice.
Inhalation:	Remove to fresh air and observe until recovered. If effects persist, seek medical advice.

Advice to Doctor: The formulation contains liquid hydrocarbons that can cause severe pneumonitis or fatal pulmonary oedema if aspirated. Consideration should be given to gastric lavage with an endotracheal tube in place. For acute or short term repeated exposures to petroleum distillates or related hydrocarbons. Primary threat to life is from pure petroleum distillate ingestion and/or inhalation, is respiratory failure. Patients should be quickly evaluated for signs of respiratory distress.

SECTION 5**FIRE FIGHTING MEASURES**

Specific Hazard: Combustible liquid (C1). Flash point 105°C.

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

Hazards from combustion products: Sealed, overheated containers may present an explosion hazard. Thermal decomposition and burning will produce toxic by-products. Fire-fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or smoke.

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. Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result.

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 neck and wrist and a washable hat, elbow length PVC gloves, face shield or goggles. If there is a significant chance that vapours or mists are likely to build up in the cleanup area, the use of a respirator is recommended. Eliminate all sources of ignition.

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. Launder protective clothing before storage or re-use.

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. Avoid contact with eyes and skin. When opening the container, preparing the spray and using the prepared spray wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves, a face shield or goggles. Wash hands after use. After each day's use, wash gloves, face shield or goggles and contaminated clothing.

Conditions for Safe Storage: Not classified as a Dangerous Good. This product is a Schedule 5 Poison (S5) and must be stored, transported and sold in accordance with the relevant Health Department regulations. This product is classified as a C1 (Combustible Liquid) for the purpose of storage and handling, in accordance with the requirements of AS 1940. Refer to state regulations for storage and transport requirements. Store in the closed, original container in a well ventilated area away from children, animals, food, feedstuffs, seed and fertilisers. Do not store for prolonged periods in direct sunlight.

SECTION 8**EXPOSURE CONTROLS / PERSONAL PROTECTION****Exposure Guidelines:**

Exposure guidelines have not been established for this product by Safe Work Australia. However, the following standard may apply:

Atmospheric Contaminant	Exposure Standard (TWA)	STEL (mg/m ³)
N-methyl-2-pyrrolidone	103 mg/m ³ (25 ppm)	309 mg/m ³ (75 ppm)
Aromatic hydrocarbons	100 ppm	Not set

TWA = Time-weight Average

Biological Limit Values: No biological limit allocated.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION (Continued)**Engineering controls:**

Keep containers closed when not in use. Use in ventilated areas adequate to keep exposure below the TWA. Ensure that the work environment remains clean and that vapours and mists are minimised.

Personal Protective Equipment (PPE):

General: When opening the container, preparing the spray and using the prepared spray wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves, a face shield or goggles. Wash hands after use. After each day's use, wash gloves, face shield or goggles and contaminated clothing.

Personal Hygiene: Avoid contact with eyes and skin. 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:	Clear brown coloured liquid.
Odour:	Hydrocarbon odour.
Boiling point:	No data available.
Freezing point:	No data available.
Specific Gravity:	Approximately 1.1 at 20°C.
Solubility in Water:	Emulsifies in water.
Flammability:	Combustible liquid (C1).
Flashpoint (°C):	105°C.
Poisons Schedule:	S5.
Decomposition temp:	No data.
Formulation type:	Emulsifiable Concentrate (EC).
Poison Schedule:	This product is a Schedule 5 (S5) poison.

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: Store in the closed original container in a cool, well ventilated area. Do not store for prolonged periods in direct sunlight. Keep away from sources of ignition.

Incompatible materials: Avoid strong oxidising agents and strong acids or bases. Hydrolyses at pH > 9.

Hazardous decomposition products: Heating may cause expansion or decomposition leading to violent rupture of containers. Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke and other toxic gases.

Hazardous reactions: Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result. Polymerisation is unlikely.

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 toxicity. Acute Oral LD₅₀ > 2,000 mg/kg. Swallowing of the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis; serious consequences may result.

Eye: The concentrate can cause irritation of the eyes. May cause redness, pain and discomfort. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly.

SECTION 11 TOXICOLOGICAL INFORMATION (Continued)**ACUTE EFFECTS (Cont):**

- Skin:** May cause skin irritation. The material may accentuate any pre-existing dermatitis condition. Acute dermal LD₅₀ > 2,000 mg/kg.
- Inhaled:** The material can cause respiratory irritation in some persons. Inhalation of high concentrations of gas/vapour causes lung irritation with coughing and nausea, central nervous depression with headache and dizziness, slowing of reflexes, fatigue and inco-ordination. Inhalation hazard is increased at higher temperatures. If exposure to highly concentrated solvent atmosphere is prolonged this may lead to narcosis, unconsciousness, even coma and possible death.

Long Term Exposure:

Chronic toxicity: In animal studies, fluroxypyr meptyl has shown no evidence of oncogenic effects, no carcinogenic effect no teratogenic potential and is not mutagenic. Fluroxypyr is absorbed from the gastrointestinal tract and eliminated principally in the urine.

Long-term exposure to respiratory irritants may result in disease of the airways involving difficult breathing and related systemic problems. Skin contact with the material is more likely to cause a sensitisation reaction in some persons compared to the general population.

Constant or exposure over long periods to mixed hydrocarbons may produce stupor with dizziness, weakness and visual disturbance, weight loss and anaemia, and reduced liver and kidney function. Skin exposure may result in drying and cracking and redness of the skin. Chronic exposure to lighter hydrocarbons can cause nerve damage, peripheral neuropathy, bone marrow dysfunction and psychiatric disorders as well as damage the liver and kidneys.

Safe Work Australia has classified N-Methyl-Pyrrolidone in the occupational environment as a reproduction category 2 substance – which indicates that there is sufficient evidence to provide a strong presumption that human exposure to the substance may result in impaired fertility.

SECTION 12 ECOLOGICAL INFORMATION

Environmental Toxicology: The following information refers to the active ingredient, fluroxypyr meptyl. Low toxicity to upland game birds (Bobwhite quail LD₅₀ > 2000 mg/kg). Mallard duck LD₅₀ > 2,000 mg/kg. Moderate toxicity to fish due to the low solubility of fluroxypyr meptyl (~0.9 mg/L). Toxic to aquatic algae. Bees: Oral LD₅₀ > 100 mg/bee, Contact LD₅₀ > 100 mg/bee. LC₅₀ (14 days) for earthworms > 1000 mg/kg. DO NOT contaminate streams, rivers or water courses.

Environmental Fate: The following information refers to the active ingredient, fluroxypyr meptyl. The product is not persistent. Half-life time (t_{1/2}): < 7 days (fluroxypyr meptyl). Degradation is primarily via: hydrolysis. Water: DT₅₀ = 1-3 days.

SECTION 13 DISPOSAL CONSIDERATIONS

Spills and Disposal: Keep material out of streams and sewers. 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: 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.

EXPLOSION WARNING: "EMPTY" containers may contain liquid and/or vapour residue which can be explosive if exposed to an ignition source at temperatures above 90°C. Such conditions may occur during cutting or welding. DO NOT cut or weld these containers.

SECTION 14**TRANSPORT INFORMATION**

Road & Rail Transport: This product is exempt from classification as a Dangerous Good in packs less than 500 kg (L) or less; or in IBC's under the Australian Code for the Transport of Dangerous Goods by Road and Rail. For bulk shipments this product is a class 9, UN 3082 (3077). (See special provision AU01).

Marine and Air Transport: Apparent Fireball 400 Herbicide is classified as a Marine Pollutant according to International Maritime Dangerous Goods (IMDG) Code and the International Air Transport Association (IATA). If transporting by sea or air the following Dangerous Goods Classification applies:-
UN 3082, Class 9 (Miscellaneous Dangerous Goods), Packing Group III, Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Contains Fluroxypyr). Hazchem code •3Z. Hazard Identification Number (HIN) 90.

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 with the Australian Pesticides and Veterinary Medicines Authority. APVMA number 81917.

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

This product is not classified as a Dangerous Good according to the ADG Code in packages 500 kg (L) or less; or in IBC's (refer to SP AU01). However, if transported by Air or Sea, this provision does not apply. This product is classified as a Dangerous Good according to 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: 15 November 2021. Valid for 5 years till 15 November 2026. (5 year update).

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.
Genotoxic: Capable of causing damage to genetic material, such as DNA.
HCIS: Hazardous Chemical 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.
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. "Hazardous Chemicals Information System". Safe Work Australia HCIS website. (2021).
2. "Classifying Hazardous Substances" Safe Work Australia. August 2018.
3. Globally Harmonized System of Classification and Labelling of Chemicals (GHS). United Nations, 2017 (7th Ed).

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.