SAFETY DATA SHEET

SECTION 1 IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: **Apparent Clobbertime 400 Herbicide**

Other Names: Carfentrazone-ethyl, Group 14 herbicide.
Use: An agricultural herbicide.
Company: AIRR Apparent Pty Ltd
Address: 15/16 Princes Street, Newport NSW 2106.
Phone Number: 03 5820 8400
Email: enquiries@apparentag.com.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.

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 Dangerous (Class 9 Environmentally Hazardous) by IATA and IMDG respectively. See Section 14 of this SDS for details.

GHS Classification:
Flammable Liquids- Hazard category 4
Aspiration Hazard – Hazard category 1.
Skin corrosion/irritation – Hazard category 2
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.
H315 Causes skin irritation.
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:
P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P210 Keep away from heat/sparks/open flames/hot surfaces: - No smoking.
P261 Avoid breathing mist, vapours or spray.
P264 Wash hands, arms and face thoroughly after handling.
P261 Avoid breathing mist, vapours or spray.
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.

SECTION 2 HAZARDS IDENTIFICATION (Continued)

Response:

P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if feel unwell.
P302 + P352	Wash with plenty of soap and water.
P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position 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 if you feel unwell.
P321	Specific treatment see Safety Directions on the product label.
P330	Rinse mouth.
P332 + P313	If skin irritation occurs: Get medical advice.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P362 + P364	Take off contaminated clothing and wash before reuse.

Storage:

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

Disposal:

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

Pictograms:



SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients:

CHEMICAL	*CAS NUMBER*	*PROPORTION*
Carfentrazone-ethyl	128639-02-1	400 g/L
N-methyl-2-pyrrolidone	872-50-4	100 g/L
Liquid hydrocarbon	Confidential	452 g/L
Other ingredients determined not to be hazardous		Balance

SECTION 4 FIRST AID MEASURES

FIRST AID

Ingestion: If swallowed, DO NOT induce vomiting. Seek medical advice and show this label or container. Make every effort to prevent vomit from entering the lungs by careful placement of the patient. Give water to rinse out mouth and then water to drink as required.

Eye contact: Immediately hold eyes open and wash with copious quantities of clean water until chemical is removed. Eyelids to be held open. Remove contact lenses after the initial flushing and continue flushing to ensure chemical is removed. If effects occur and persist, consult a physician, preferably an ophthalmologist.

Skin contact: Remove contaminated clothing, including footwear. Wash skin with soap and water. Contaminated clothing should be laundered before reuse.

Inhalation: Remove from exposure and observe until recovered. If effects persist, seek medical advice.

Advice to Doctor: Carfentrazone-ethyl has low acute toxicity. Treatment is otherwise controlled removal of exposure followed by symptomatic and supportive care. Treat symptomatically, mainly for hydrocarbon solvent ingestion. If the product has been aspirated into the lungs (ie. from vomiting), consider the possibility of chemical pneumonitis.

SECTION 5 FIRE FIGHTING MEASURES

Specific Hazard: Product is a combustible liquid. Flash point > 62°C.

Extinguishing media: Foam, CO_2 or dry chemical. Soft stream water fog if no alternatives. Contain all runoff.

Hazards from combustion products: On burning will emit toxic fumes.

Precautions for fire-fighters and special protective equipment: Isolate fire area. Evacuate downwind. Wear full protective clothing and self-contained breathing apparatus. Do not breathe or contact smoke, gases 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 cotton overalls buttoned to the neck and wrist (or equivalent clothing) and a washable hat, elbow-length chemical resistant 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. If a significant quantity of material enters drains, advise emergency services. Thoroughly launder protective clothing before storage or re-use.

This product is a herbicide and spills can damage crops, pastures and desirable vegetation. Prevent from entering drains, waterways or sewers. Use earthen bunds or absorbent bunding to prevent spreading of spillage.

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: Will irritate the nose and throat. Will damage eyes. Avoid contact with eyes and skin. Do not inhale spray mist. When opening the container and preparing spray, and if applying by hand, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and a washable hat, elbow-length chemical resistant gloves, and face shield or goggles. When using the prepared spray wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and elbow-length chemical resistant gloves. If product in eyes, wash it out immediately with water. Wash hands after use. After each day's use, wash gloves, face shield or goggles and contaminated clothing.

Conditions for Safe Storage: Store in tightly closed original container in a cool, dry well-ventilated area out of direct sunlight when not in use. This product is a Schedule 5 Poison (S5) and must be stored, transported and sold in accordance with the relevant Health Department regulations. Not classified as a Dangerous Good for transport within Australia by road and rail. 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, however a component of this product (N-methyl-2-pyrrolidone) has the following exposure guideline established by Safe Work Australia.

Atmospheric Contaminant	Exposure Standard (TWA)	Exposure Standard (STEL)
N-methyl-2-pyrrolidone	103 mg/m³ (25 ppm)	309 mg/m³ (75 ppm)

TWA = Time-Weighted Average; STEL = Short term Exposure Limit

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION (Continued)

Biological Limit Values:
No biological limit allocated.

Engineering controls:
Use in ventilated areas adequate to keep exposure below the TWA. Keep containers closed when not in use.

Personal Protective Equipment (PPE):
When opening the container and preparing spray, and if applying by hand, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and a washable hat, elbow-length chemical resistant gloves, and face shield or goggles. When using the prepared spray wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and elbow-length chemical resistant gloves. If product in eyes, wash it out immediately with water. Wash hands after use.

Personal Hygiene: Will irritate the nose and throat. Will damage eyes. Avoid contact with eyes and skin. Do not inhale spray mist. Clean water should be available for washing in case of eye or skin contamination. After each day's use, wash gloves, face shield or goggles and contaminated clothing. Wash skin before eating, drinking or smoking. Shower at the end of the workday.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Brown coloured liquid.
Odour:	Aromatic like odour.
Boiling point:	No data available.
Freezing point:	No data available.
Specific Gravity:	Approximately 1.1 g/L.
Solubility in Water:	Emulsifies in water.
pH:	No data available.
Vapour pressure:	No data available.
Flammability:	Combustible liquid.
Flashpoint (°C):	> 62°C.
Poisons Schedule:	Product is a Schedule 5 (S5) poison.
Formulation type:	Emulsifiable Concentrate.

SECTION 10 STABILITY AND REACTIVITY

Chemical Stability: Product is considered stable in ambient conditions for a period of at least 2 years after manufacture. This product is unlikely to spontaneously decompose.

Conditions to avoid: Do not store for prolonged periods in direct sunlight. Avoid strong oxidising agents. Avoid excessive sources of heat and naked flames.

Incompatible materials: Keep away from strong oxidizing agents.

Hazardous decomposition products: When the product is heated to high temperatures, thermal decomposition may generate toxic and noxious fumes, including carbon monoxide, carbon dioxide, nitrogen oxides, hydrogen chloride and hydrogen fluoride.

Hazardous reactions: Not known to polymerise.

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.

SECTION 11 TOXICOLOGICAL INFORMATION

Potential Health Effects:

ACUTE EFFECTS

Swallowed: The LD_{50} (rat) > 2000 mg/kg. Small amounts swallowed incidentally as a result of normal handling operations are not likely to cause injury; however, if the product has been aspirated into the lungs (ie. from vomiting), consider the possibility of chemical pneumonitis.

Eye: May cause severe eye irritation with corneal injury which may result in permanent impairment of vision, even blindness.

Skin: This product has a low dermal toxicity. The dermal LD_{50} in the rabbit is > 4000 mg/kg. Skin contact may result in irritation with a degreasing action on the skin. Repeated or prolonged skin contact may lead to irritant contact dermatitis.

Inhaled: No adverse effects are anticipated from single exposure to vapour. Mist may cause irritation of upper respiratory tract (nose and throat). If the product has been aspirated into the lungs (ie. from vomiting), consider the possibility of chemical pneumonitis.

Long Term Exposure:

In studies with laboratory animals, carfentrazone-ethyl did not cause reproductive toxicity, teratogenicity or carcinogenicity. An overall absence of genotoxicity has been demonstrated in tests of mutagenicity, DNA damage and chromosomal aberrations.
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 Information: No data is available on Apparent Clobbertime 400 Herbicide. Toxicity data is on the active constituent, Carfentrazone-ethyl.

Environmental Toxicology: Carfentrazone-ethyl is toxic to algae (EC_{50} = 15 ppb), moderately toxic to fish (LC_{50} 1.6 to 2 mg/L) and slightly toxic to aquatic crustacean (LC_{50} = > 9.8 mg/L). Carfentrazone-ethyl was shown to cause no effects to earthworms at concentrations up to 820 mg/kg in soil. Carfentrazone-ethyl is slightly toxic to birds (LD_{50} > 2,250 mg/kg) and low toxicity to bees (no deaths at 200 µg/bee). Do not contaminate sewers, drains, dams, creeks or any other waterways with product or the used container.

Environmental Properties: Carfentrazone-ethyl is rapidly degraded in soils under aerobic and anaerobic conditions (half-life = 1 to 2 days). Carfentrazone-ethyl rapidly hydrolyses at pH 9 but stable at pH 5. Field studies show that Carfentrazone-ethyl has a low potential for movement in the soil. The Log P of 3.36 and a measured bioconcentration factor of 206 in fish, indicate a low potential for accumulation. The low vapour pressure (1.19×10^{-7} Torr) indicates that volatility is not a concern.

SECTION 13 DISPOSAL CONSIDERATIONS

Spills and Disposal: Persons involved in cleanup require complete skin protection - see Section 8. In case of spillage, contain and absorb spilled material with absorbent material such as clay, sand or cat litter and dispose of waste as indicated below or in accordance to the Australian Standard 2507- Storage and Handling of Pesticides. Keep out animals and unprotected persons. 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.

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

SECTION 13 DISPOSAL CONSIDERATIONS (Continued)

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.

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 (refer to SP AU01). For bulk shipments this product is a class 9, UN 3082.

Marine and Air Transport: Apparent Clobbertime 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 Carfentrazone). Hazchem code ●3Z. Hazard Identification Number (HIN) 90. Australian Standards Emergency Guide 47.

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 86549.
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 for packs less than 500 kg (L), or in IBC's, (SP AU01) (7th Ed).
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: 10 November 2021. Valid for 5 years till 10 November 2026. (First issue).

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.
LD_{50}:	Median Lethal Dose A statistically derived single dose of a substance that can be expected to cause death in 50% of dosed animals.
Mutagenic:	Capable of inducing a genetic mutation in an organism.
OCS:	Office of Chemical Safety.
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. (2020).
2. "Classifying Hazardous Substances" Safe Work Australia. August 2018.
3. Globally Harmonized System of Classification and Labelling of Chemicals (GHS). United Nations, 2009.

SECTION 16 OTHER INFORMATION (Continued)

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