

**Section 1 - Identification**

<b>Turf Culture Pty Ltd</b> <b>43 Gap Road</b> <b>Sunbury, Vic 3429 Australia</b>	<b>Phone: 1300 11 8873</b> <b>Fax: 03 8888 9991</b> <b>www.turfculture.com.au</b>
---	---

**Chemical nature:** Herbicide containing carfentrazone-ethyl.  
**Trade Name:** **Smackdown Herbicide**  
**APVMA Code:** 64135  
**Product Use:** Agricultural herbicide for use as described on the product label.  
**Creation Date:** **January, 2025**  
**This version issued:** **January, 2025** and is valid for 5 years from this date.  
**Poisons Information Centre: Phone 13 1126 from anywhere in Australia**

**Section 2 - Hazards Identification**

**Statement of Hazardous Nature**

**SUSMP Classification:** S5

**ADG Classification:** Class 9: Miscellaneous Dangerous Goods.

**UN Number:** 3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CARFENTRAZONE-ETHYL)



**GHS Signal word: DANGER**

Aspiration Hazard Category 1  
 Reproductive Toxicity Category 1  
 Hazardous to aquatic environment Acute Category 1  
 Hazardous to aquatic environment Chronic Category 2

**HAZARD STATEMENT:**

AUH066: Repeated exposure may cause skin dryness or cracking.  
 H304: May be fatal if swallowed and enters airways.  
 H360D: May damage the unborn child.  
 H400: Very toxic to aquatic life.  
 H411: Toxic to aquatic life with long lasting effects.

**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, sparks, open flames and hot surfaces. - No smoking.  
 P262: Do not get in eyes, on skin, or on clothing.  
 P264: Wash contacted areas thoroughly after handling.  
 P280: Wear protective gloves, protective clothing and eye or face protection.

**RESPONSE**

P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
 P303+P361+P353: IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water.  
 P308+P313: If exposed or concerned: Get medical advice.  
 P370+P378: In case of fire: Use carbon dioxide, dry chemical, foam, to extinguish.

**STORAGE**

P410: Protect from sunlight.  
 P402+P404: Store in a dry place. Store in a closed container.  
 P403+P235: Store in a well-ventilated place. Keep cool.

**DISPOSAL**

P501: Dispose of contents and containers as specified on the registered label.

**Emergency Overview**

**Physical Description & Colour:** Clear yellow to red liquid.

**Odour:** Characteristic odour.

**SAFETY DATA SHEET**

### Section 3 – Composition and Information on Ingredients

Ingredients	CAS No	Conc, g/L	TWA (mg/m <sup>3</sup> )	STEL (mg/m <sup>3</sup> )
Carfentrazone ethyl ester	128639-02-1	240	not set	not set
Aromatic hydrocarbons	64742-94-5	736	not set	not set
N-Methyl-2-pyrrolidone	872-50-4	20	103	309
Other non hazardous ingredients	secret	to 1 L	not set	not set

This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other non hazardous ingredients are also possible.

The SWA TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. The STEL (Short Term Exposure Limit) is an exposure value that may be equalled (but should not be exceeded) for no longer than 15 minutes and should not be repeated more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak" is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.

### Section 4 - First Aid Measures

#### General Information:

You should call The Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 13 1126 from anywhere in Australia (0800 764 766 in New Zealand) and is available at all times. Have this SDS with you when you call.

**Inhalation:** First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

**Skin Contact:** Irritation is unlikely. However, if irritation does occur, flush with lukewarm, gently flowing water for 5 minutes or until chemical is removed.

**Eye Contact:** No effects expected. If irritation does occur, flush contaminated eye(s) with lukewarm, gently flowing water for 5 minutes or until the product is removed. Obtain medical advice if irritation becomes painful or lasts more than a few minutes. Take special care if exposed person is wearing contact lenses.

**Ingestion:** If swallowed, do NOT induce vomiting. Immediately contact a Poisons Information Centre, or call a doctor. Wash mouth with water. If vomiting occurs naturally, lay patient on side, in recovery position as there is a chance that vomitus may enter airways causing harm to lungs.

### Section 5 - Fire Fighting Measures

**Fire and Explosion Hazards:** The major hazard in fires is usually inhalation of heated and toxic or oxygen deficient (or both), fire gases. There is little risk of an explosion from this product if commercial quantities are involved in a fire. Violent steam generation or eruption may occur upon application of direct water stream on hot liquids. Fire decomposition products from this product may be toxic if inhaled. Take appropriate protective measures.

**Extinguishing Media:** In case of fire, use carbon dioxide, dry chemical or foam. Alcohol resistant foam is the preferred firefighting medium but, if it is not available, normal foam can be used. Try to contain spills, minimise spillage entering drains or water courses.

**Fire Fighting:** If a significant quantity of this product is involved in a fire, call the fire brigade. There is little danger of a violent reaction or explosion if significant quantities of this product are involved in a fire. Recommended personal protective equipment is full fire kit and breathing apparatus.

### Section 6 - Accidental Release Measures

**Accidental release:** In the event of a major spill, prevent spillage from entering drains or water courses. As a minimum, wear overalls, goggles and gloves. Suitable materials for protective clothing include no specific manufacturer recommendations. Use impermeable gloves with care. Eye/face protective equipment should comprise, as a minimum, protective glasses and, preferably, goggles. If there is a significant chance that vapours or mists are likely to build up in the cleanup area, we recommend that you use a respirator. Usually, no respirator is necessary when using this product. However, if you have any doubts consult the Australian Standard mentioned below (section 8). Otherwise, not normally necessary.

Stop leak if safe to do so, and contain spill. Absorb onto sand, vermiculite or other suitable absorbent material. If spill is too large or if absorbent material is not available, try to create a dike to stop material spreading or going into drains or waterways. Because of the environmentally hazardous nature of this product, special care should be taken to restrict release to waterways or drains. Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage, and dispose of promptly. Recycle containers wherever possible after careful cleaning. Refer to product label for specific instructions. After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. Full details regarding disposal of used containers, spillage and unused material may be found on the label. If there is any conflict between this SDS and the label, instructions on the label prevail. Ensure legality of disposal by consulting regulations prior to disposal. Thoroughly launder protective clothing before storage or re-use. Advise laundry of nature of contamination when sending contaminated clothing to laundry.

## SAFETY DATA SHEET

## Section 7 - Handling and Storage

**Handling:** Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. Check Section 8 of this SDS for details of personal protective measures, and make sure that those measures are followed. The measures detailed below under "Storage" should be followed during handling in order to minimise risks to persons using the product in the workplace. Also, avoid contact or contamination of product with incompatible materials listed in Section 10. Take special care if handling this product over extended periods as it is a cumulative poison.

**Storage:** This product is a Scheduled Poison. Observe all relevant regulations regarding sale, transport and storage of this schedule of poison. Check packaging - there may be further storage instructions on the label.

## Section 8 - Exposure Controls and Personal Protection

The following Australian Standards will provide general advice regarding safety clothing and equipment:

Respiratory equipment: **AS/NZS 1715**, Protective Gloves: **AS 2161**, Occupational Protective Clothing: **AS/NZS 4501 set 2008**, Industrial Eye Protection: **AS1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS2210**.

<b>SWA Exposure Limits</b>	<b>TWA (mg/m<sup>3</sup>)</b>	<b>STEL (mg/m<sup>3</sup>)</b>
N-Methyl-2-pyrrolidone	103	309

The ADI for Carfentrazone ethyl ester is set at 0.03mg/kg/day. The corresponding NOEL is set at 3mg/kg/day. ADI means Acceptable Daily Intake

NOEL means No-observable-effect-level. Data from Australian ADI List, March 2017.

No special equipment is usually needed when occasionally handling small quantities. The following instructions are for bulk handling or where regular exposure in an occupational setting occurs without proper containment systems.

**Ventilation:** This product should only be used where there is ventilation that is adequate to keep exposure below the TWA levels. If necessary, use a fan.

**Eye Protection:** Eye protection such as protective glasses or goggles is recommended when this product is being used.

**Skin Protection:** You should avoid contact even with mild skin irritants. Therefore you should wear suitable impervious elbow-length gloves and facial protection when handling this product for lengthy periods. See below for suitable material types.

**Protective Material Types:** There is no data that enables us to recommend any type except that it should be impermeable.

**Respirator:** Usually, no respirator is necessary when using this product. However, if you have any doubts consult the Australian Standard mentioned above.

## Section 9 - Physical and Chemical Properties:

<b>Physical Description &amp; colour:</b>	Clear yellow to red liquid.
<b>Odour:</b>	Characteristic odour.
<b>Freezing/Melting Point:</b>	No specific data. Liquid at normal temperatures.
<b>Boiling Point:</b>	Not available.
<b>Flash point:</b>	>94°C
<b>Upper Flammability Limit:</b>	No data.
<b>Lower Flammability Limit:</b>	No data.
<b>Flammability Class:</b>	Not flammable (GHS): C2 combustible (AS 1940)
<b>Volatiles:</b>	No data.
<b>Vapour Pressure:</b>	No data.
<b>Vapour Density:</b>	No data.
<b>Specific Gravity:</b>	Approx 1.07
<b>Water Solubility:</b>	Dispersible.
<b>pH:</b>	6.5-7.5 (1% w/w aqueous mixture)
<b>Volatility:</b>	No data.
<b>Odour Threshold:</b>	No data.
<b>Evaporation Rate:</b>	No data.
<b>Coeff Oil/water Distribution:</b>	No data
<b>Particle Characteristics:</b>	Not applicable for liquids.
<b>Autoignition temp:</b>	No data.

### SAFETY DATA SHEET

## Section 10 - Stability and Reactivity

**Reactivity:** This product is unlikely to react or decompose under normal storage conditions. However, if you have any doubts, contact the supplier for advice on shelf life properties.

**Conditions to Avoid:** Protect this product from light. Store in the closed original container in a dry, cool, well-ventilated area out of direct sunlight.

**Incompatibilities:** strong acids, strong bases, strong oxidising agents.

**Fire Decomposition:** Combustion forms carbon dioxide, and if incomplete, carbon monoxide and possibly smoke. Water is also formed. May form nitrogen and its compounds, and under some circumstances, oxides of nitrogen. Occasionally hydrogen cyanide gas in reducing atmospheres. Carbon monoxide poisoning produces headache, weakness, nausea, dizziness, confusion, dimness of vision, disturbance of judgment, and unconsciousness followed by coma and death.

**Polymerisation:** Polymerisation reactions are unlikely. They are not expected to occur.

## Section 11 - Toxicological Information

### Local Effects:

**Target Organs:** This product may affect gastrointestinal system. Ingredients in this product have an established TWA, so exposure by inhalation should be avoided.

**Major Health Hazards:** may be fatal if swallowed and enters airways, may damage the unborn child, repeated exposure may cause skin dryness or cracking. This product is a cumulative poison. Minor exposures over a period of time may lead to serious health problems.

## Classification of Hazardous Ingredients

Ingredient	Health Hazard Statement Codes
Carfentrazone Ethyl Ester	H410
<ul style="list-style-type: none"> <li>• Hazardous to the aquatic environment (acute) – category 1</li> <li>• Hazardous to the aquatic environment (chronic) – category 1</li> </ul>	
Aromatic Hydrocarbons	H304, AUH066
<ul style="list-style-type: none"> <li>• Aspiration hazard – category 1</li> </ul>	
N-methyl-2-pyrrolidone	H319, H315, H335, H360D
<ul style="list-style-type: none"> <li>• Eye irritation – category 2A</li> <li>• Skin irritation – category 2</li> <li>• Specific target organ toxicity (single exposure) – category 3</li> <li>• Reproductive toxicity – category 1B</li> </ul>	

## Potential Health Effects

### Inhalation:

**Short Term Exposure:** Available data indicates that this product is not harmful. In addition product is unlikely to cause any discomfort or irritation.

**Long Term Exposure:** No data for health effects associated with long term inhalation.

### Skin Contact:

**Short Term Exposure:** Available data indicates that this product is not harmful. It should present no hazards in normal use. However product may be irritating, but is unlikely to cause anything more than mild transient discomfort.

**Long Term Exposure:** Repeated exposure may cause skin dryness or cracking.

### Eye Contact:

**Short Term Exposure:** This product may be irritating to eyes, but is unlikely to cause anything more than mild transient discomfort.

**Long Term Exposure:** No data for health effects associated with long term eye exposure.

### Ingestion:

**Short Term Exposure:** Significant oral exposure is considered to be unlikely. This product, while believed to be not harmful, is likely to cause headache and gastric disturbance such as nausea and vomiting if ingested in significant quantities. Because of the low viscosity of this product, it may directly enter the lungs if swallowed, or if subsequently vomited. Once in the lungs, it is very difficult to remove and can cause severe injury or death. However, this product may be irritating to mucous membranes but is unlikely to cause anything more than transient discomfort.

## SAFETY DATA SHEET

**Long Term Exposure:** Long term minor exposures to this product may cause serious health effects.

**Carcinogen Status:**

**SWA:** No significant ingredient is classified as carcinogenic by SWA.

**NTP:** No significant ingredient is classified as carcinogenic by NTP.

**IARC:** No significant ingredient is classified as carcinogenic by IARC.

**Section 12 - Ecological Information**

This product is very toxic to aquatic life. This product toxic to aquatic life with long lasting effects. This product is not readily biodegradable; it may accumulate in the soil or water and cause long term problems.

**Section 13 - Disposal Considerations**

**Disposal:** Special help is available for the disposal of Agricultural Chemicals. The product label will give general advice regarding disposal of small quantities, and how to cleanse containers. However, for help with the collection of unwanted rural chemicals, contact ChemClear 1800 008 182 <http://www.chemclear.com.au/> and for help with the disposal of empty drums, contact DrumMuster <http://www.drummuster.com.au/> where you will find contact details for your area.

**Section 14 - Transport Information**

**Not subject to the ADG Code when transported by Road or Rail in Australia, in packages 500kg(L) or less; or IBCs, but classed as Dangerous by IATA and IMDG/IMSBC when carried by Air or Sea transport (see details below).**

**UN Number:** 3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CARFENTRAZONE-ETHYL)

**Hazchem Code:** •3Z

**Special Provisions:** 179, 274, 331, 335, AU01

**Limited quantities:** ADG 7 specifies a Limited Quantity value of 5 L for this class of product.

**Dangerous Goods Class:** Class 9: Miscellaneous Dangerous Goods.

**Packing Group:** III

**Packing Instruction:** P001, IBC03, LP01

Class 9 Miscellaneous Dangerous Goods shall not be loaded in the same vehicle or packed in the same freight container with Dangerous Goods of Class 1 (Explosives).

**Section 15 - Regulatory Information**

**AICS:** All of the significant ingredients in this formulation are compliant with AICIS regulations.

The following ingredient: N-Methyl-2-pyrrolidone, is mentioned in the SUSMP.

**Section 16 - Other Information**

**This SDS contains only safety-related information. For other data see product literature.**

**Acronyms:**

<b>ADG Code</b>	Australian Code for the Transport of Dangerous Goods by Road and Rail (7 <sup>th</sup> edition)
<b>AICS/AIIC</b>	Australian Inventory of Industrial Chemicals
<b>SWA</b>	Safe Work Australia, formerly ASCC and NOHSC
<b>CAS number</b>	Chemical Abstracts Service Registry Number
<b>Hazchem Code</b>	Emergency action code of numbers and letters that provide information to emergency services especially firefighters
<b>IARC</b>	International Agency for Research on Cancer
<b>NOS</b>	Not otherwise specified
<b>NTP</b>	National Toxicology Program (USA)
<b>SUSMP</b>	Standard for the Uniform Scheduling of Medicines & Poisons
<b>UN Number</b>	United Nations Number

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 MUST REVIEW THIS SDS IN THE CONTEXT OF HOW THE PRODUCT WILL BE HANDLED AND USED IN THE WORKPLACE.

IF CLARIFICATION OR FURTHER INFORMATION IS NEEDED TO ENSURE THAT AN APPROPRIATE RISK ASSESSMENT CAN BE MADE, THE USER SHOULD CONTACT THIS COMPANY SO WE CAN ATTEMPT TO OBTAIN ADDITIONAL INFORMATION FROM OUR SUPPLIERS OUR RESPONSIBILITY FOR PRODUCTS SOLD IS SUBJECT TO OUR STANDARD TERMS AND CONDITIONS, A COPY OF WHICH IS SENT TO OUR CUSTOMERS AND IS ALSO AVAILABLE ON REQUEST.

**SAFETY DATA SHEET**

Please read all labels carefully before using product.

This SDS is prepared in accord with the SWA document "Preparation of Safety Data Sheets for Hazardous Chemicals - Code of Practice" (July 2020) and GHS Revision 7  
Copyright © Kilford & Kilford Pty Ltd, January, 2025.

<http://www.kilford.com.au> Phone (02)8321 8866

**SAFETY DATA SHEET**