

Safety Data Sheet Safety Data Sheet according to SWA and ADG requirements

| Date of issue: 20/03/2025 Version: 001 | | | |
|--|--|---|--|
| SECTION 1: Identification | | | |
| 1.1. Product identifier | | | |
| Trade name | : Albaugh Solve Ester 570 EC Herbicide | | |
| 1.2. Other means of identification | ก | | |
| MCPA 2-ethylhexyl ester | | | |
| 1.3. Recommended use of the c | hemical and restrictions on use | | |
| 1.3.1. Recommended use | | | |
| Industrial/Professional use | : For professional use only | | |
| Use of the substance/mixture | : Agriculture Herbicde | | |
| 1.3.2. Restrictions on use | | | |
| No additional information available. | | | |
| 1.4. Details of the manufacture | /importer | | |
| Albaugh Australia Pty Ltd Level 1, 530 Little Collins Street, MELB Tel (03) 99097183 ABN: 676 890 994 | OURNE 3000, Australia | | |
| 1.5. Emergency phone number | | | |
| Emergency number | : 1800 862 115 (Australia) +61 2 9037 2994 Local (City): Sydney | | |
| SECTION 2: Hazards identific | ation | | |
| 2.1. Classification of the hazard | ous chemical | | |
| This material is hazardous according to Safety regulations, Australia. | Globally Harmonised System of Classification and labelling of Chemicals (GHS) inc | cluding Work, Health and | |
| Classification of the substance or mixtu Acute toxicity (oral) Acute toxicity (dermal) Acute toxicity (inhalation) Skin irritation Serious eye irritation | re: Category 4 Category 4 Category 4 Category 2 Category 2A | | |
| The following hazard classes fall outsic Hazardous to the aquatic environment Hazardous to the aquatic environment | | | |
| 2.2. Label elements, including | recautionary statements | | |
| Hazard pictograms | Exclamation Mark | | |
| Signal word | : Warning | | |
| Hazard statements | H302 Harmful if swallowed. H312 Harmful in contact with skin. H332 Harmful if inhaled. H315 Causes skin irritation. H319 Causes serious eye irritation. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects. | | |
| Precautionary statements | P261 Avoid breathing dust/fume/gas/mist/vapours/spray. P264 Wash hands and forearms thoroughly after handling. P270 Do not eat, drink or smoke when using this product. 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 + P312 IF SWALLOWED: Call a POISON CENTRE or doctor if ye P302 + P352 IF ON SKIN: Wash with plenty of water. P304 + P340 IF INHALED: Remove person to fresh air and keep comfor P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for se contact lenses, if present and easy to do. Continue rinsing. P312 Call a POISON CENTRE or doctor if you feel unwell. | ou feel unwell. ortable for breathing. | |

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P321 Specific treatment (see on this label).

P330 Rinse mouth.

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.

P391 Collect spillage.

P501 Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

SECTION 3: Composition and information on ingredients

| Name | Ingredient identifier (CAS No.) | Content (w/v) |
|---|---------------------------------|---------------|
| MCPA present as the 2-ethylhexyl ester | 29450-45-1 | 57.0% |
| Alkoxylated alkylphenol | 37251-69-7 | < 10% |
| Mixture of Calcium Dodecylbenzene Sulphonate, Linear & 2 Ethylhexanol | - | < 10% |
| Other components are not considered hazardous in this formulation and therefore are not required to be disclosed according to the WHS | | |

Regulations

| SECTION 4: First aid measures | | |
|---|--|--|
| 4.1. Description of necessary first aid measures | | |
| First-aid measures general | : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible). | |
| First-aid measures after ingestion | : Rinse mouth immediately. DO NOT induce vomiting. Obtain emergency medical attention. | |
| First-aid measures after inhalation | : Remove to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration. Call a POISON INFORMATION CENTER (Australia) on 13 11 26 or doctor/physician. | |
| First-aid measures after eye contact | : Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain emergency medical attention. | |
| First-aid measures after skin contact | : Remove affected clothing and wash all exposed skin area with plenty of mild soap and water. If symptoms develop, seek medical advice. | |
| First aid facitilities | Eyewash, safety shower and normal washroom facilities. | |
| 4.2. Symptoms caused by exposure | | |
| Symptoms/injuries after ingestion | : Harmful if swallowed. May cause gastrointestinal irritation, nausea, diarrhoea and vomiting. | |
| Symptoms/injuries after inhalation | Harmful if inhaled. May cause respiratory irritation. Danger of serious damage to health by prolonged exposure through inhalation. | |
| Symptoms/injuries after eye contact | : Causes serious eye irritation. | |
| Symptoms/injuries after skin contact | : Harmful in contact with skin. Causes skin irritation. | |
| 4.3. Medical attention and special treatment | | |
| Treat symptomatically. | | |
| SECTION 5: Firefighting measures | | |
| 5.1. Suitable extinguishing equipment | | |
| Suitable extinguishing media | : Foam. Dry powder. Carbon dioxide. Water spray. | |
| Unsuitable extinguishing media | : Do not use a heavy water stream. | |
| 5.2. Specific hazards arising from the c | hemical | |
| In the event of fire the following may be released: oxides of carbon and nitrogen, nitrogen, other nitrogen compounds, hydrogen cyanide, hydrogen chloride, other chlorine compounds and smoke. | | |
| 5.3. Special protective equipment and p | recautions for firefighters | |
| Firefighting instructions | : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering drains or water bodies. | |
| | Remove product from areas of fire, or otherwise cool containers with water in order to avoid pressure being built up due to heat. Whenever possible, contain fire-fighting water by diking area with sand or earth. Do not allow run-off from fire fighting to enter drains or water courses. | |
| Protection during firefighting | : In the event of fire and/or explosion do not breathe fumes. Wear self-contained breathing apparatus and protective suit. Do not enter fire area without proper protective equipment, including respiratory protection. Breathable air apparatus must be worn when fighting a fire in which this product is involved. | |

Hazchem code

| SEC | TION 6: Accidental release measures |
|-------|---|
| 6.1. | Personal precautions, protective equipment and emergency procedures |
| Avoid | contact with spilled product or contaminated surfaces. Wear appropriate personal protective equipment and clothing to prevent exposure. |

Evacuate all non-essential personnel from affected area. Do not breathe vapours. Ensure adequate ventilation.

•3Z (bulk only)

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Protective equipment

- Emergency procedures
- : Do not attempt to take action without suitable protective equipment. See Section 8

: Ventilate area. Do not breathe mist/vapours/spray. Avoid contact with skin and eyes.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters. Avoid release to the environment.

6.3. Methods and materials for containment and cleaning up

Soak up spills with inert solids, such as clay, sand, soil, vermiculite or diatomaceous earth as soon as possible. Collect spillage in sealable open-top type containers for disposal. If large liquid spills occur, attempt to recover as much spilt material from sumps and bunded areas, as possible, before absorbing remaining material into vermiculite or other absorbent.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. Do not breathe mist/spray. Use only outdoors or in a well-ventilated area. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid contact with skin and eyes.

Wear personal protective equipment. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

| | this product. Always wash hands after handling the product. | | |
|---|---|--|--|
| 7.2. Conditions for safe storage, including any incompatibilities | | | |
| Storage conditions | : Keep only in the original container in a cool, well ventilated place out of direct sunlight. Store in a locked enclosure. Keep container tightly closed. Do not store with seed, fertilisers or foodstuffs. | | |
| Incompatibilities | : Strong acids, bases and oxidising agents. Protect from direct sunlight, heat, sparks, open flames and other sources of ignition. | | |
| SECTION 8: Exposure controls/per | sonal protection | | |
| 8.1. Exposure control measures | | | |
| Exposure standards | No value assigned for this specific material by Safe Work Australia. | | |
| 8.2. Biological monitoring | | | |
| No biological limit allocated for the product. No | biological monitoring is required. | | |
| 8.3. Control banding | | | |
| Not available. | | | |
| 8.4. Engineering controls | | | |
| Handle in well-ventilated areas, generally natu | ral ventilation is adequate. | | |
| 8.5. Individual protection measures | | | |
| Personal protective equipment | : Avoid all unnecessary exposure. When opening the container, preparing spray and using the prepared spray wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves and goggles and appropriate respiratory protection. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. After each day's use, wash contaminated clothing and safety equipment. | | |
| Eye and face protection | : Chemical goggles or safety glasses. Eye protection devices should conform to relevant regulations. Consult AS/NZS 1336 and AS/NZS 1337 for further information. | | |
| Skin protection | : Wear protective gloves of impervious material. Occupational protective gloves should conform to relevant regulations. Consult AS/NZS 2161 and AS/NZS 4501 for further information. | | |
| Respiratory protection | : If ventilation is inadequate, suitable respiratory protection should be worn, consult AS/NZS 1715 and AS/NZS 1716 for further information. | | |
| Thermal hazards | : No further relevant information available. | | |
| SECTION 9: Physical and chemica | properties | | |
| Physical state | : Liquid | | |
| Colour | : Clear brown | | |
| Odour | : Characteristic solvent odour | | |
| Odour threshold | : No data available | | |
| рН | : No data available | | |
| Density | : No data available | | |
| Relative evaporation rate (butylacetate=1) | : No data available | | |
| Melting point | : Not applicable | | |
| Freezing point | : No data available | | |
| Boiling point | : 182-202°C at 100kPa (solvent) | | |
| Flash point | : No data available | | |
| Auto-ignition temperature | : No data available | | |
| Decomposition temperature | : >150°C | | |
| | | | |

Flammability

Vapour pressure

Non flammableNegligible (MCPA)

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| Relative vapour density at 20 °C | : No data available |
|--|---------------------|
| Relative density | : ~1.056 |
| Solubility | : Emulsifiable |
| Log Pow | : No data available |
| Viscosity, kinematic | : No data available |
| Viscosity, dynamic | : No data available |
| Explosive properties | : No data available |
| Oxidising properties | : No data available |
| Explosive limits | : No data available |
| Particle characteristics | : Not applicable |
| Partition coefficient: n-octanol/water (log value) | : No data available |
| | |

| SECTION 10: Stability and reactivity | |
|---|---|
| 10.1. Reactivity | |
| No additional information available. | |
| 10.2. Chemical stability | |
| Stable under normal conditions. | |
| 10.3. Possibility of hazardous reactions | |
| No additional information available. | |
| 10.4. Conditions to avoid | |
| Direct sunlight. Extremely high or low temperature | es. |
| 10.5. Incompatible materials | |
| Strong acids. Strong bases. Keep away from stro | ng oxidising agents. |
| 10.6. Hazardous decomposition products | |
| Thermal decomposition may result in the release oxides (NOx). | of toxic and/or irritating fumes. Hydrogen cyanide (hydrocyanic acid), Carbon monoxide, Nitrogen |
| SECTION 11: Toxicological informati | on |
| 11.1. Information on toxicological effects | |
| | |
| Albaugh Solve Ester 570 EC Herbicide | |
| Acute toxicity | : Considered to be harmful if swallowed, inhaled or if in contact with skin according to available information. |
| | Data on the active constituent, MCPA 2-ethylhexyl ester (CAS 29450-45-1) |
| | Oral LD50 (rat): 1300 mg/kg (EPM) |
| | Dermal LD50 (rabbit): > 2000 mg/kg (EPM) |
| | Inhalation LC50 (rat): > 4.5 mg/l (EPM) |
| Skin corrosion/irritation | : Causes skin irritation. |
| Serious eye damage/irritation | : Causes serious eye irritation. |
| Respiratory or skin sensitisation | : Not a skin sensitiser and not expected to be a respiratory sensitiser according to available information. |
| Germ cell mutagenicity | : Not suspected to cause genetic defects according to available information. |
| Carcinogenicity | : Not considered to be carcinogenic according to available information. |
| Reproductive toxicity | : Not considered to be toxic to reproduction according to available information. |
| Specific target organ toxicity (single exposure) | : Not expected to cause toxicity to a specific target organ through single exposure according to available information. |
| Specific target organ toxicity (repeated exposure) | : Not expected to cause toxicity to a specific target organ according to available information. |
| Aspiration hazard | : Not expected to be an aspiration hazard according to available information. |

SECTION 12: Ecological information

12.1. Ecotoxicity

Very toxic to aquatic life with long lasting effects.

| MCPA 2-ethylhexyl ester (CAS 29450-45-1) | | |
|--|--|-----|
| LC50 Fish (96h) | > 3.2 mg/l for rainbow trout and bluegill sunfish | |
| EC50 Daphnia (48h) | 0.28 mg/l | |
| ErC50 Algae (120h) | 2 mg/l for Anabaena flos-aquae,1.2 mg/l for Navicula pelliculosa | |
| 20/03/2025 | EN (English) | 4/6 |

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| 10.0 | | |
|----------|-------------------------------|--|
| 12.2. | Persistence and degradability | |
| Persiste | ence and degradability | : No additional information available. |
| 12.3. | Bioaccumulative potential | |
| Bioaccu | imulative potential | : No additional information available. |
| 12.4. | Mobility in soil | |
| Mobili | ty in soil | : No additional information available. |
| 12.5. | Other adverse effects | |
| Other | information | : The following data is for MCPA (CAS 94-74-6): |
| | | LD50 (oral and contact) >200 μg/bee. |
| | | Birds: Acute oral LD50 for bobwhite quail 377 mg/kg. Sub-acute dietary LC50 (5 d) for bobwhite |

SECTION 13: Disposal considerations

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. Do not reuse container for any other purpose.

| SECTION 14: Transport infor | mation |
|-----------------------------|---|
| Road and rail transport | Environmentally Hazardous Substances meeting the descriptions of UN 3077 or UN 3082 are not subject to the provisions of the Australian Code for the Transport of Dangerous Goods by Road and Rail as per the Australian Special Provisions AU01. |
| Additional Information: | : Australian Special Provisions AU01: Environmentally Hazardous Substances meeting the description of UN 3077 or UN 3082 are not subject to this Code when transported by road or rail in; |
| | (a) packagings that do not incorporate a receptacle exceeding 500 Kg (L); or(b) IBCs. |

| Marine transport: | : | Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; MARINE POLLUTANT |
|---|---|--|
| UN Number | : | 3082 |
| Proper Shipping Name or Technical Name: | : | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (CONTAINS MCPA 2-ETHYLHEXYL ESTER) |
| Transport Hazard Class: | : | 9 |
| Packaging Group: | : | III |
| Hazchem Code: | : | •3Z |
| IMDG EMS Fire: | : | F-A |
| IMDG EMS Spill: | : | S – F |
| Environmental Hazards: | : | Yes. Marine Pollutant. |
| Special Precautions for User: | : | Not available. |
| Additional Information: | : | The marine pollutant mark is not required when transported in sizes of \leqslant 5 L or \leqslant 5 kg. |

| Air transport: | : | IATA provision SP A197: Environmentally Hazardous Substances meeting the description of UN 3077 or UN 3082 are not subject to this Code when transported air in packages that have inner packages (plastic bottles, glass bottles, plastic bags) of 5 L for UN3082 and 5 kg for UN3077 or less. |
|---|---|---|
| UN Number | : | 3082 |
| Proper Shipping Name or Technical Name: | : | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (CONTAINS MCPA 2-ETHYLHEXYL ESTER) |
| Transport Hazard Class: | : | 9 |
| Packaging Group: | : | III |
| Special Precautions for User: | : | Not available. |
| Additional Information: | : | IATA Special Provision A197: when transported in sizes of \leq 5 L or \leq 5 kg per packaging (inner or single) are not subject to the code. |

| SECTION 15: Regulatory information | | | |
|------------------------------------|------------------------|--|--|
| 15.1. Safety, health and env | ironmental regulations | | |
| APVMA Number | : 93920 | | |
| Poison Schedule | : Schedule 6 | | |
| | | | |

AICIS

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: Listing in the AICS is not required for products regulated by the APVMA.

| SECTION 16: Any other rele | vant information | |
|----------------------------|---|--|
| Date of issue | : 20/03/2025 | |
| Version | : 001 | |
| Reason(s) for issue | : First issue. | |
| Literature References | : See respective sections for information | |
| Abbreviations | ADG Code - Australian Code for the Transport of Dangerous Goods by Road and Rail (edition) AICIS - Australian Industrial Chemicals Introduction Scheme (formerly NICNAS) AIIC - Australian Inventory of Industrial Chemicals APVMA - Agricultural Pesticides and Veterinary Medicines Australia ATE - Acute Toxicity Estimate BCF - Bioconcentration factor BLV - Biological limit value BOD - Biochemical Abstract Service number COD - Chemical Abstract Service number COD - Chemical avygen demand (BOD) EC50 - Median effective concentration EPM - British Crop Protection Council Database, e-Pesticide Manual GHS - Globally Harmonised System of Classification and Labelling of Chemicals (7th revise edition) 2017 IARC - International Agency for Research on Cancer IATA - International Maritime Dangerous Goods LC50 - Median lethal concentration LD05 - Median lethal dose LOAEL - Lowest Observed Adverse Effect Level NOAEC - No-Observed Adverse Effect Concentration NOAEL - No-Observed Adverse Effect Level NOAEC - No-Observed Effect Concentration NOAEL - No-Observed Effect Concentration NOAS Not Otherwise Specified Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice (June 2023) STEL - Short term exposure limit means the average airborne concentration of a substar calculated over a 15 minute period. The STEL should not be exceeded at any time during normal eight hour working day. SUSMP - Standard for the Uniform Scheduling of Medicines & Poisons SWA - Safe Work Australia, formerly ASCC and NOHSC | |

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product