

# SAFETY DATA SHEET

## SECTION 1 IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: **AgMerch MCPA LVE 570 EC Herbicide**

**Other Names:** MCPA. Group I Herbicide.  
**Use:** An agricultural herbicide for use in cereals and pastures.  
**Company:** AgMerch Pty Ltd  
**Address:** 217 Wyndham Street, Shepparton, Vic 3630  
**ACN/ABN:** 26 645 371 017  
**Email:** info@agmerch.com.au  
**Emergency Contact:** 0498 530 214

## 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.**

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

Acute Toxicity – Oral: Category 4.  
Acute Toxicity – Dermal: Category 4.  
Skin corrosion/irritation. Hazard Category 2  
Acute Toxicity – Inhalation: Category 4.  
Hazardous to the Aquatic Environment – Long-Term (Chronic) Hazard: Category 1.

**Signal Word:** WARNING.

### Hazard statements:

H302 Harmful if swallowed.  
H312 Harmful in contact with skin.  
H315 Causes skin irritation.  
H332 Harmful if inhaled.  
H410 Very toxic to aquatic life with long lasting effects.

### Precautionary Statements:

#### Prevention:

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.  
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.

#### Response:

P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor if feel unwell.  
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.  
P304 + P340 IF INHALED: Remove victim 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.  
P310 Immediately call a POISON CENTER or doctor.  
P312 Call a POISON CENTER or doctor if you feel unwell.  
P321 Specific treatment see Safety Directions on product label.  
P330 Rinse mouth.  
P332 + P313 If skin irritation occurs: Get medical advice/attention.

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

P362 + P364 Take off immediately all contaminated clothing and wash it before reuse.  
 P370 + P378 In case of fire: Use carbon dioxide, foam or dry agent to extinguish.  
 P391 Collect Spillage.

**Disposal:**

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

Pictograms:

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

<b>CHEMICAL</b>	<b>CAS NUMBER</b>	<b>PROPORTION</b>
MCPA as the 2-ethylhexyl ester	2039-46-5	570 g/L
Other ingredients 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. If swallowed do NOT induce vomiting. Wash mouth out with water.
- Eye contact:** Immediately hold eyes open and flood with clean water to remove chemical. Ensure irrigation under eyelids by occasionally lifting them. Do not try to remove contact lenses unless trained. If irritation persists, seek medical attention.
- Skin contact:** Remove contaminated clothing and launder before re-use. Wash skin with soap and water. If skin is irritated, seek medical advice.
- Inhalation:** Remove to fresh air and observe until recovered. If irritation or symptoms persists more than about 30 minutes, seek medical advice.
- Advice to Doctor:** Treat symptomatically. If vomiting occurs, the solvent present in the formulation may cause pulmonary pneumonitis.

**SECTION 5 FIRE FIGHTING MEASURES**

**Specific Hazard:** Combustible liquid – Flash point > 100°C

**Extinguishing media:** Extinguish fire using carbon dioxide, foam or dry agent. If waterspray is used, contain all runoff. Contain all runoff.

**Hazards from combustion products:** There is a slight risk of an explosion from this product if commercial quantities are involved in a fire. On heating will emit toxic fumes. Firefighters to wear self-contained breathing apparatus and suitable protective clothing if risk to 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.

**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, a washable hat, elbow-length PVC gloves and goggles.

In the case of spillage, stop leak if safe to do so, and contain spill and absorb spilled material with absorbent material such as sand, clay or cat litter. Collect recoverable product for use as labelled on the

**SECTION 6 ACCIDENTAL RELEASE MEASURES (Continued)**

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.

**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. If a significant quantity of material enters drains, advise emergency services. Thoroughly launder protective clothing before storage or re-use.

**SECTION 7 HANDLING AND STORAGE**

**Precautions for Safe Handling:** Harmful if swallowed. Attacks eyes. Will irritate the skin. When 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. If product in eyes, wash it out immediately with 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 gloves, goggles and contaminated clothing.

**Conditions for Safe Storage:** 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. Not classified as a Dangerous Good. This product is a Schedule 6 Poison (S6) 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.

**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 <sup>3</sup> )
Aromatic hydrocarbons	100 ppm	Not set

TWA = Time-weight Average

**Biological Limit Values:**

No biological limit allocated.

**Engineering controls:**

Use in ventilated areas. Keep containers closed when not in use. No special engineering controls are required.

**Personal Protective Equipment (PPE):**

**General:** When 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. If product in eyes, wash it out immediately with 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 gloves, goggles and contaminated clothing.

**Hygiene Measures:** Harmful if swallowed. Attacks eyes. Will irritate the skin. 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 and safety equipment.

**SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance:</b>	Clear, brown liquid.
<b>Odour:</b>	Characteristic solvent odour.
<b>Boiling point:</b>	No data available.
<b>Freezing point:</b>	No data available.
<b>Solubility in Water:</b>	Forms an emulsion in water.
<b>pH:</b>	No data available.

**SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES (Continued)**

<b>Flammability:</b>	Not flammable.
<b>Flash point:</b>	> 100°C.
<b>Poisons Schedule:</b>	This product is a Schedule 6 (S6) poison.
<b>Specific Gravity:</b>	1.0.
<b>Formulation type:</b>	Emulsifiable Concentrate (EC).

**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:** Keep away from strong oxidizing agents.

**Incompatible materials:** Strong oxidizing agent such as chlorates, nitrates, peroxides etc.

**Hazardous decomposition products:** If heated until evaporation of water, the residual material can emit toxic fumes. Will not polymerise.

**Hazardous reactions:** Avoid contact of the concentrate with strong alkalis and alkaline materials such as lime. 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:	Harmful if swallowed. Acute Oral LD <sub>50</sub> (rat) = 1300 mg/kg - MCPA 2-ethylhexyl ester.
Eye:	This product will cause severe irritation to the eyes. Possible eye damage if not washed off immediately.
Skin:	This product will irritate the skin and may be sensitising to sensitive individuals. Acute dermal LD <sub>50</sub> > 2,000 mg/kg – MCPA 2-ethylhexyl ester.
Inhaled:	Inhalation of mists or sprays may produce respiratory irritation. LC <sub>50</sub> > 4.5 mg/L/4hr – MCPA 2-ethylhexyl ester.

**CHRONIC TOXICITY:** MCPA dietary levels of approximately 50 mg/kg/day and 125 mg/kg/day over 7 months caused reduced feeding rates and retarded growth rates in rats. White blood cell counts and ratios were not affected, but some reductions in red blood cell counts and haemoglobin did appear to be associated with exposure to MCPA at oral dose levels of approximately 20 mg/kg/day. In the same study, oral doses of approximately 5 mg/kg/day caused increased relative kidney weights, and oral doses of approximately 20 mg/kg/day caused increased relative liver weights. Other studies in rats showed no effects on kidney or liver weights over an unspecified period at oral doses of 60 mg/kg/day, but oral doses of 150 mg/kg/day did cause reversible increases in these weights over a period of 3 months. Very high dermal doses of 500 mg/kg/day caused reduced body weight, and even higher dermal doses of 1000 and 2000 mg/kg/day resulted in increased mortality and observable changes in liver, kidney, spleen, & thymus.

**Mutagenic effects:** MCPA is reportedly weakly mutagenic to bone marrow and ovarian cells of hamsters, but negative results were reported for other mutagenic tests. It was negative in a bacterial test system (both with and without metabolic activation), negative in spot tests, and negative in host-mediated tests. It produced no detectable increase in chromosomal aberrations in house flies. Some irregularities occurred in gene transfer during cell division in brewer's yeast, although at levels which caused massive cell death. It appears that the compound poses little or no mutagenic risk.

**Carcinogenic effects:** All available evidence on MCPA indicates that the compound does not cause cancer. Forestry and agricultural workers occupationally exposed to MCPA in Sweden did not show increased cancer incidence.

**SECTION 11 TOXICOLOGICAL INFORMATION (Continued)**

**Reproductive effects:** A two-generation rat study at doses of up to 15 mg/kg/day affected reproductive function. Even smaller amounts of the compound were toxic to the foetuses. Dogs receiving relatively small amounts of MCPA (8 and 16 mg/kg) for 13 weeks showed adverse sperm and testes changes. It is unlikely that humans will experience these effects under normal exposure conditions.

**Teratogenic effects:** Offspring of pregnant rats fed 20 to 125 mg/kg of MCPA on days 6 to 15 of gestation, had no birth defects. However, when the ethyl ester form of MCPA was fed to pregnant rats (2 to 100 mg/kg/day on days 8 to 15 of gestation), cleft palate, heart defect, and kidney anomalies were observed in the offspring. Mice fed 5 to 100 mg/kg/day of MCPA on days 6 to 15 showed significantly reduced foetal weight and delayed bone development at the highest dose. Teratogenic effects in humans are unlikely at expected exposure levels.

**Organ toxicity:** Target organs identified in animal studies include the liver, kidneys, spleen and thymus. Farm worker exposure has resulted in reversible anaemia, muscular weakness, digestive problems, and slight liver damage.

**Fate in humans and animals:** MCPA is rapidly absorbed and eliminated from mammalian systems. Rats eliminated nearly all of a single oral dose within 24 hours, mostly through urine with little or no metabolism. In another rat study, three quarters of the dose was eliminated within 2 days. All was gone by 8 days. Humans excreted about half of a 5 mg dose in the urine within a few days. No residues were found after day 5. Cattle and sheep fed low to moderate doses of MCPA in the diet for 2 weeks showed no residues from levels less than about 18 mg/kg.

**SECTION 12****ECOLOGICAL INFORMATION**

**Environmental Toxicology:** No data is available on this product. Moderate to high toxicity to aquatic organisms. LC<sub>50</sub> (96 hr) for rainbow trout is 50 - 560 mg/L for MCPA; LC<sub>50</sub> (96 hr) for bluegill sunfish is > 135 mg/L; LC<sub>50</sub> (48 hr) for daphnia is > 190 mg/L. MCPA is practically nontoxic to freshwater invertebrates, and estuarine and marine organisms. Non-toxic to bees. Moderate toxicity to birds LD<sub>50</sub> for bobwhite quail is 377 mg/kg for MCPA.

**Environmental Fate:** MCPA and its formulations are rapidly degraded by soil microorganisms and it has low persistence, with a reported field half-life of 14 days to 1 month, depending on soil moisture and soil organic matter. With less than 10% organic matter in soil, MCPA is degraded in 1 day and, with greater than 10% levels in soil, it takes 3 to 9 days to degrade. The half-life is 5 to 6 days in slightly acidic to slightly alkaline soils. MCPA readily leaches in most soils, but its mobility decreases with increasing organic matter. MCPA and its formulations show little affinity for soil. It is relatively stable to light breakdown but can be rapidly broken down by microorganisms. In sterilized water, it takes about 5 weeks for half of the compound to degrade due to the action of sunlight. In rice paddy water, however, MCPA is almost totally degraded by aquatic microorganisms in under 2 weeks.

**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. To decontaminate spill area, tools and equipment, wash with detergent and water and add the solution to the drums of wastes already collected and label contents. Dispose of drummed wastes, including decontamination solution in accordance with the requirements of Local or State Waste Management Authorities. If there is a need to dispose of the product, approach local authorities who hold periodic collections of unwanted chemicals (ChemClear®).

**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.

Do not cut or saw empty containers, as there is the possibility that fumes inside the container maybe ignited and cause the container to explode.

**SECTION 14****TRANSPORT INFORMATION**

**Transport Information:** This product is not classified as a Dangerous Goods under the Australian Code for the Transport of Dangerous Goods by Road and Rail. Not classified as a Dangerous Good for marine or air transport. It is good practice not to transport agricultural chemical products with food, food related materials and animal feedstuffs.

**SECTION 15****REGULATORY INFORMATION**

Under the Standard for Uniform Scheduling of Medicines and Poisons (SUSMP), this product is a Schedule 6 poison.

This product is registered under the Agricultural and Veterinary Chemicals Code Act 1994. Product Registration No. 84452.

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

This product is not classified as a Dangerous Good.

*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 September 2021. Valid for 5 years till 15 September 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.

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.

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: Australian government statutory body established in 2008 to develop national policy relating to Worker Health & Safety and workers' compensation.

**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 (7<sup>th</sup> 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.