



1. Product identifier & identity for the chemical

Product Identifier	Clock 300 Herbicide
Active Constituent	Clopyralid present as the Trisopropanolamine salt
Other means of Identification	Agricultural herbicide. Grow Choice product code number: 3001 AVPMA registered number: 56239
Formulation type	Liquid
Recommended use of the chemical and restrictions on due	For control of a wide range of broadleaf weeds in wheat, barley, oats, triticale, canola, pastures, fallow land, forests and industrial situations as specified on the label.
Suppliers name, address and phone number:	Grow Choice Pty Ltd 113 Fitzroy Street TAMWORTH NSW 2340 Phone: 02 6766 3979 Email: admin@growchoice.com.au
Emergency phone number:	In Case Of Emergency Dial 000
Poisons Information Centre	Phone: 13 11 26 and speak to a Poisons Information Specialist. Fax: +61 2 9845 3597 http://www.chw.edu.au/poisons/contact.htm

2. Hazard Identification

Classified as **HAZARDOUS** in accordance with the Safe Work Australia, Globally Harmonized System of Classification and Labelling of Chemicals (the GHS).

Not classified as a dangerous goods under the ADG 7.

Classification of the hazardous chemical Eye damage – category 1

GHS symbol Corrosion



Signal word **Danger** - Corrosive

General Precautionary Statements. If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use.

Hazard Statements H318: **Causes serious eye damage**
Prevention Statements P280: **Wear eye protection/face protection.** Goggles and face shield: As/NZS 1337, Eye protectors for industrial applications.

Response Statements 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/physician.**

Storage Statements Refer Section 7
Disposal Statements Refer Section 13

3. Composition/information on ingredients

Chemical ingredients:	Component	CAS No	Proportion (g/L)
CAS number and other unique identifiers:	Clopyralid present as the Trisopropanolamine salt	1702-17-6	300
Concentration of ingredients:	Other non-hazardous ingredients		Balance

4. First Aid Measures

Swallow	If swallowed, do not induce vomiting. Rinse mouth out with water if patient is conscious. Seek urgent medical attention.
Eye:	If product gets in eyes, remove contact lenses if wearing and wash it out immediately with water for several minutes. Seek medical attention.
Skin:	Remove contaminated clothing and wash affected areas thoroughly with soap and water. Seek medical attention if symptoms persist.
Inhaled	Move affected person to fresh air and keep at rest until recovered. If inhaled remove to fresh air and keep at rest. Obtain medical advice if at all worried. If not breathing give artificial respiration & get urgent medical attention.
Medical Attention and Special Treatment	In Case Of Emergency Dial 000 and/or Poisons Information Centre: Phone: 13 11 26 and speak to a Poisons Information Specialist with a copy of this SDS or chemical Label.

5. Fire Fighting Measures

Suitable extinguishing media	Water, fog, alcohol foam, foam, CO ² , dry chemical.
Specific hazards arising from the chemical	Product may produce noxious fumes under fire conditions. Contain water from firefighting to prevent entry to surface and ground water.
Special protective equipment and precautions for fire fighters	Fire fighters should wear Safe Work Australia approved self-contained breathing apparatus (AS/NZS 1715/1716) and full protective equipment. Keep unnecessary people away. If it can be done safely, remove intact containers from the fire. Bund area with sand or earth to prevent contamination of drains or waterways. Dispose of extinguishing agent and spillage safely later. Contamination of water bodies should be avoided.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	In case of spillage it is important to take all steps necessary to: Instruct and ensure all bystanders to keep away from and upwind of spill/leak. Avoid eye and skin contact; Do not breath dust/fumes, Ensure adequate ventilation; Avoid contamination of waterways. Refer to Section 8 for Personal Protection Equipment (PPE).
Environmental precautions	Avoid contamination of waterways, drains and sewers.
Methods and materials for containment and cleaning up	Reposition any leaking containers so as to minimise leakage. Dam and absorb spill with an absorbent material (eg sand, clay or soil). Shovel the absorbed spill into drums. Final clean up with detergent or degreaser is recommended.

7. Handling and Storage

Precautions for safe handling	Safe work practices are recommended. Avoid contact with eyes and skin. When opening the container and preparing spray wear appropriate PPE (refer Section 8). Do not spray under high wind conditions. Hygiene measures: When using products, do not eat, drink or smoke. Contaminated work clothing should not be allowed out of the workplace. Wash hands thoroughly with soap and water after use and before eating, drinking, smoking/using tobacco, chewing gum, using the toilet or applying cosmetics. After each day's use, wash gloves, face shield or goggles and contaminated clothing. Avoid contact with eyes and skin.
Conditions for safe storage, including any incompatibilities:	Keep out of reach of children, unauthorised persons and animals. Store in tightly sealed original containers in a dry secure place away from fertilizers, feed and food. Store out of direct sunlight and extreme temperature. Always read the label and any attached leaflet before use.

8. Exposure controls/personal protection

Control parameters – exposure standards, biological monitoring	No exposure standard has been established for this product as per the HSIS Exposure Standards database.
Appropriate engineering controls	Natural ventilation is sufficient when handling concentrate and preparing the spray solution. Do not inhale spray mist.
Personal protective equipment (PPE)	When opening the container, preparing the spray and using the prepared spray, wear cotton overalls buttoned to the next and wrist and a washable hat, elbow length PVC chemical resistant and face shield or goggles. Face and Eye Protection: Face shield or goggles. Clothing: Cotton overalls buttoned to the neck and wrist (or equivalent clothing) and a washable hat. Gloves: Elbow-length chemical resistant PVC gloves. Respiratory: If airborne concentrations are likely to exceed the exposure standards above or if exposed to dust, an AS/NZS 1715/1716 approved respirator should be worn. Training as required by State or Local regulations should be adhered to for people who use pesticides in their job or business. Recommended to use Australian and New Zealand Standard PPE: Overalls AS 3765, Clothing for protection against Hazardous chemicals Gloves: AS/NZS 2161, Industrial safety gloves and mittens (not electrical and medical gloves) Goggles and face shield AS/NZS 1337, Eye protectors for industrial applications. Footwear AS/NZS 2210, Occupational protective footwear Respirators AS NZS 1715 Selection, Use and Maintenance of Respiratory Protective Devices AS/NZS 1716, Respiratory Protective Devices

9. Physical and chemical properties (continued on page 3)

Appearance, form, colour and odour	Clear to dark green/blue odourless liquid
pH	6-8 undiluted
Boiling point	~100°C at 100KPa
Flash point	N/A
Specific Gravity	1.17 @ 20°C
Flammability	Noncombustible material
Solubility in water	Soluble in water
Vapour Pressure	1.33 mPa at 24°C for clopyralid acid

10. Stability and Reactivity

Chemical stability	Product stable under normal conditions.
Incompatible materials and possible hazardous reactions	Avoid acids, bases and oxidizing materials
Hazardous decomposition products	Noxious fumes under fire conditions – hydrogen chloride and others.
Hazardous Polymerization	Hazardous Polymerization is not possible.

11. Toxicological information

Information on routes of exposure and symptoms related to exposure	No harmful effects are expected if the precautions on the label and this safety data sheet are followed.
Immediate, delayed and chronic health effects from exposure	
Acute Toxicity – Oral	LD50 (rat) >5000 mg/kg for a similar formulation
Acute Toxicity Dermal	LD50 (rat) >2000 mg/kg for a similar formulation LC50 (rat) (4hr) >0.38 mg/l for clopyralid
Acute Toxicity - Inhalation	The concentrate is of low toxicity if swallowed. Amounts swallowed incidental to normal handling procedures and use are not expected to cause injury
Ingestion	The components of the product are of low volatility and no adverse effects are expected from handling the concentrate.
Inhalation	When applying the product as a spray avoid breathing in spray mist.
Eye	The concentrate is likely to cause irritation of the eyes if product enters eyes.
Skin Sensitisation	Not a skin irritant and not harmful by dermal exposure
Serious eye damage/irritation	Corneal injury is likely.
Skin corrosion/irritation	Prolong contact may cause skin irritation with local redness. Prolonged skin contact is unlikely to result in absorption of harmful amounts. The LD50 for skin absorption in rabbits is > 2000 mg/kg
Exposure Levels/Chronic effects	The weight of the evidence is that clopyralid is not carcinogenic. Reproductive Data indicates no reproductive effects. Toxicity Chronic Effects Mutagenicity Data indicates no mutagenic effects.
Data limitations	The Australian Acceptable Daily Intake (ADI) for Clopyralid for a human is 0.5 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 50 mg/kg/day. (Ref: Comm. Dept. of Health and Ageing, Office of Chemical Safety, 'ADI List', June 2014).

12. Ecological information

Eco toxicity	Based largely or completely on information for clopyralid acid: Material is toxic to aquatic organisms on an acute basis. Material is slightly toxic to birds on an acute basis. Material is practically non-toxic to birds on a dietary basis.
Persistence and degradability	Clopyralid is hydrolytically stable and photochemical degradation is slow (half-life 19.5 days).
Bio -accumulative potential	Clopyralid is not readily biodegradable under the conditions of the EU Ready Biodegradability test EEC method C5, OECD No. 301B).
Mobility in soil	Clopyralid rapidly degrades to CO ₂ in the soil (field half-life 2 -24 days). Degradation is retarded under cold conditions or very dry soils. Clopyralid slowly degrades in water/sediment systems (half-life 143 – 182 days).

13. Disposal considerations

Safe handling and disposal methods	On site disposal of the concentrated product is not acceptable. Ideally, the product should be used for its intended purpose. If there is a need to dispose of the product, approach local authorities who hold periodic collections of unwanted chemicals (ChemClear®).
Disposal of any contaminated packaging	Do not use this container for any other purpose. Triple rinse containers, add rinsate to the spray tank, then offer the container for recycling/reconditioning, or puncture top, sides and bottom and dispose of in landfill in accordance with local regulations. drumMUSTER is the national program for the collection and recycling of empty, cleaned, non-returnable crop production and on-farm animal health chemical containers. If the label on your container carries the drumMUSTER symbol, triple rinse the container, ring your local Council, and offer the container for collection in the program. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, puncture or shred and bury containers in local authority landfill. If no landfill is available, bury the containers below 500mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.
Environmental regulations	

14. Transport information

This product is not classified as a dangerous good according to the Australian Code for the Transport of Dangerous Goods by road or rail (ADG7).

This product is not classified as dangerous according to the IMDG Code for transport by sea.

15. Regulatory information

Poisons Schedule number Standard for the Uniform Scheduling of Drugs and Poisons (SUSMP) – Poison Schedule: 5
Clopyralid is listed in the Australian Inventory of Chemical Substances (AICS).

16. Other information

Date of Review This Safety Data Sheet (SDS) was completed 16 July 2020 and replace MSDS 10 July 2015.

Acronyms:

AVPMA: Australian Pesticides and Veterinary Medicines Authority.

GHS: Globally Harmonised system of Classification and Labelling of chemicals HSIS: Hazardous Substances Information System

NOHSC: National Occupational Health and Safety Commission

CAS No.: unique numerical identifier assigned by Chemical Abstracts Service (division of the American Chemical Society) AS/NZS: Australian Standards and New Zealand Standards for Personal protective equipment

ADI: Acceptable Daily Intakes For Agricultural And Veterinary Chemicals EMS Number:

ADG: Australian Dangerous Goods

IMDG: International Maritime Code of Dangerous Goods IATA:

International Air Transport Association

End of SDS

DISCLAIMER:

This SAFETY DATA SHEET has been developed according to the Work Health and Safety Regulations (WHS Regulations) Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals December 2011. The data, information and recommendations herein ("information") are represented in good faith and believed to be correct as of the date hereof. The purpose of this SAFETY DATA SHEET is to describe product in terms of their safety requirements. Grow Choice Pty Ltd makes no representation of merchantability, fitness for a particular purpose of application, or of any other nature with respect to the information or the product to which the information refers ("the product"). The information is supplied upon the condition that the persons receiving same will make their own determination as to its suitability for their purpose prior to the use of the product. The physical data shown herein are typical values based on the material tested. These values should not be construed as a guaranteed analysis of any specific lot or as guaranteed specification for the product or specific lots thereof. Due care should be taken to make sure that the use or disposal of this product and/or its packaging is in compliance with Relevant Federal, State and Local Government regulations.