

Infosafe No™ 1CHG1 Issue Date : January 2021 RE-ISSUED by CHEMSUPP

Product Name **GA-10 GIBBERELLIC ACID 10% w/v solution in ethanol**

Classified as hazardous

## 1. Identification

**GHS Product Identifier** GA-10 GIBBERELLIC ACID 10% w/v solution in ethanol

**Company Name** CHEMSUPPLY AUSTRALIA PTY LTD (ABN 19 008 264 211)

**Address** 38 - 50 Bedford Street GILLMAN  
SA 5013 Australia

**Telephone/Fax Number** Tel: (08) 8440-2000

**Emergency phone number** CHEMCALL 1800 127 406 (Australia) / +64-4-917-9888 (International)

**E-mail Address** www.chemsupply.com.au

**Recommended use of the chemical and restrictions on use** Plant growth promotant and laboratory reagent.

<b>Other Names</b>	<u>Name</u>	<u>Product Code</u>
	GA-10 GIBBERELLIC ACID 10% w/v solution in ethanol LR	GL076

### Other Information

ChemSupply Australia Pty Ltd does not warrant that this product is suitable for any use or purpose. The user must ascertain the suitability of the product before use or application intended purpose. Preliminary testing of the product before use or application is recommended. Any reliance or purported reliance upon ChemSupply Australia Pty Ltd with respect to any skill or judgement or advice in relation to the suitability of this product of any purpose is disclaimed. Except to the extent prohibited at law, any condition implied by any statute as to the merchantable quality of this product or fitness for any purpose is hereby excluded. This product is not sold by description. Where the provisions of Part V, Division 2 of the Trade Practices Act apply, the liability of ChemSupply Australia Pty Ltd is limited to the replacement of supply of equivalent goods or payment of the cost of replacing the goods or acquiring equivalent goods.

## 2. Hazard Identification

**GHS classification of the substance/mixture** Eye Damage/Irritation: Category 2A  
Flammable Liquids: Category 2

**Signal Word (s)** DANGER

**Hazard Statement (s)** H225 Highly flammable liquid and vapour.  
H319 Causes serious eye irritation.

**Pictogram (s)** Flame, Exclamation mark



**Precautionary statement – Prevention**

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
P233 Keep container tightly closed.  
P240 Ground/bond container and receiving equipment.  
P241 Use explosion-proof electrical/ventilating/lighting/.../equipment.  
P242 Use only non-sparking tools.  
P243 Take precautionary measures against static discharge.  
P264 Wash thoroughly after handling.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.

**Precautionary statement – Response**

Eyes  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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**Precautionary statement – Storage** P337+P313 If eye irritation persists: Get medical advice/attention.  
Fire  
P370+P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.  
**Precautionary statement – Disposal** P403+P235 Store in a well-ventilated place. Keep cool.  
P501 Dispose of contents/container to an approved waste disposal plant.

### 3. Composition/information on ingredients

Ingredients	Name	CAS	Proportion
	Ethanol	64-17-5	90 %
	Gibberellic acid	77-06-5	9.9-10.1 %

### 4. First-aid measures

**Inhalation** If inhaled, remove from contaminated area to fresh air immediately. Apply artificial respiration if not breathing. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.

**Ingestion** Rinse mouth thoroughly with water immediately, repeat until all traces of product have been removed. DO NOT INDUCE VOMITING. Seek medical advice if effects persist.

**Skin** Wash affected areas with copious quantities of water. Remove contaminated clothing and wash before re-use. If persistent irritation occurs, obtain medical attention.

**Eye contact** Immediately irrigate with copious quantity of water for at least 15 minutes. Eyelids to be held open. If rapid recovery does not occur, obtain medical attention

**First Aid Facilities** Maintain eyewash fountain and safety shower in work area.

**Advice to Doctor** Treat symptomatically based on judgement of doctor and individual reactions of the patient.

**Other Information** For advice, contact a Poisons Information Centre (Phone eg Australia 13 1126; New Zealand 0800 764 766) or a doctor.

### 5. Fire-fighting measures

**Specific Methods** Caution: Use of water spray when fighting fire may be inefficient.  
Small fire: Use foam, dry chemical, CO2 or water spray.  
Large fire: Use foam, fog or water spray - Do not use water jets.  
If safe to do so, move undamaged containers from fire area. Cool containers with flooding quantities of water until well after fire is out. Avoid getting water inside containers.

**Specific hazards arising from the chemical** HIGHLY FLAMMABLE: Products has a low flash point - Will be easily ignited by heat, sparks or flames at ambient temperatures. Vapours will form explosive mixtures with air. Vapours will travel to source of ignition and flash back. Fire may produce irritating, poisonous and/or corrosive gases. Containers may explode when heated. Product is lighter than water. Vapours are heavier than air and will collect in low or confined areas (drains, basements, tanks). Vapours from run-off may create an explosion hazard.

**Hazchem Code** •2YE

**Precautions in connection with Fire** SCBA and gas-tight suits should be worn when dealing with damaged or leaking containers and where there is no risk of ignition. SCBA and structural firefighting uniform provide limited protection where there is a risk of ignition.

### 6. Accidental release measures

**Spills & Disposal** ELIMINATE all ignition sources (no smoking, flares, sparks or flame) within at least 50m - All equipment used in handling the product must be earthed. Do not touch or walk through spilled material. Stop leak if safe to do so - Prevent entry into waterways, drains or confined areas. Vapour-suppressing foam may be used to control vapours. Absorb spill with earth, sand or other non-combustible material - Use clean,

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non-sparking tools to collect material and place it in loosely-covered metal or plastic containers for later disposal. Water spray may be used to knock down or divert vapour clouds.  
SEEK EXPERT ADVICE ON HANDLING AND DISPOSAL.

**Personal Precautions** Evacuate the area of all non-essential personnel.

**Personal Protection** Wear protective clothing specified for normal operations (see Section 8)

**Clean-up Methods - Small Spillages** Absorb or contain liquid with sand, earth or spill control material. Shovel up using non sparking tools and place in a labelled, sealable container for subsequent safe disposal. Put leaking containers in a labelled drum or overdrum.

## 7. Handling and storage

**Precautions for Safe Handling** Containers must be earthed to avoid generation of static charges when agitating or transferring product. Ensure all electrical equipment is flameproofed. Do not breathe vapour. Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure.

**Conditions for safe storage, including any incompatibilities** Store away from oxidizing agents. Keep container tightly closed in a dry, well-ventilated place away from direct sunlight and other sources of heat or ignition. Store at room temperature (15 - 25 °C). Store small containers in suitable flammable liquid storage cabinets. Larger drums (200L) must be kept in purpose-built stores.

**Storage Regulations** Refer Australian Standard AS 1940 - 1993 'The storage and handling of flammable and combustible liquids'.

**Unsuitable Materials** Aluminium

## 8. Exposure controls/personal protection

Occupational exposure limit values	<u>Name</u>	STEL		TWA		<u>Footnote</u>
		<u>mg/m3</u>	<u>ppm</u>	<u>mg/m3</u>	<u>ppm</u>	
	Ethanol			1880	1000	
<b>Other Exposure Information</b>	<p>These Workplace Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These workplace exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.</p> <p>A time weighted average (TWA) has been established for Ethyl alcohol [Ethanol] (Safe Work Australia) of 1,880 mg/m<sup>3</sup>, (1,000 ppm). The exposure value at the TWA is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week.</p>					
<b>Appropriate engineering controls</b>	Maintain the concentrations values below the TWA. This may be achieved by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods.					
<b>Respiratory Protection</b>	Where ventilation is not adequate, respiratory protection may be required. Avoid breathing vapours or mists. Select and use respirators in accordance with AS 1716 - Respiratory Protective Devices and be selected in accordance with AS 1715 - Selection, Use and Maintenance of Respiratory Protective Devices. When mists or vapours exceed the exposure standards then the use of the following is recommended: Approved respirator with organic vapour and dust/mist filters. Filter capacity and respirator type depends on exposure levels.					
<b>Eye Protection</b>	The use of a face shield, chemical goggles or safety glasses with side shield protection as appropriate. Must comply with Australian Standards AS 1337 and be selected and used in accordance with AS 1336.					
<b>Hand Protection</b>	Wear gloves of impervious material conforming to AS/NZS 2161: Occupational protective gloves - Selection, use and maintenance. Final choice of appropriate glove type will vary according to individual circumstances. This can include methods of handling, and engineering controls as determined by appropriate risk assessments. Avoid skin contact when removing gloves from hands, do not touch the gloves outer surface. Dispose of gloves as hazardous waste.					

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<b>Personal Protective Equipment</b>	Personal protective equipment should not solely be relied upon to control risk and should only be used when all other reasonably practicable control measures do not eliminate or sufficiently minimise risk. Guidance in selecting personal protective equipment can be obtained from Australian, Australian/New Zealand or other approved standards.
<b>Footwear</b>	Safety boots in industrial situations is advisory, foot protection should comply with AS 2210, Occupational protective footwear - Guide to selection, care and use.
<b>Body Protection</b>	Flame retardant antistatic protective clothing. Clean clothing or protective clothing should be worn, preferably with an apron. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.
<b>Hygiene Measures</b>	Always wash hands before smoking, eating or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

## 9. Physical and chemical properties

<b>Form</b>	Liquid
<b>Appearance</b>	Clear colourless liquid.
<b>Odour</b>	Mild, characteristic odour.
<b>Freezing Point</b>	-114 °C (Ethanol)
<b>Boiling Point</b>	78 °C (Ethanol)
<b>Solubility in Water</b>	Soluble.
<b>Solubility in Organic Solvents</b>	Miscible with methanol, ether, chloroform and acetone.
<b>Specific Gravity</b>	0.79 g/ml (Ethanol)
<b>pH</b>	Acidic
<b>Vapour Pressure</b>	59 hPa (Ethanol)
<b>Vapour Density (Air=1)</b>	1.59 (Ethanol)
<b>Evaporation Rate</b>	4.1 (Butyl Acetate = 1) (Ethanol)
<b>Viscosity</b>	1.200 cP @ 20 °C (Ethanol)
<b>Volatile Component</b>	100%
<b>Partition Coefficient: n-octanol/water</b>	-2.0 (Gibberellic acid) -0.32 (Ethanol)
<b>Flash Point</b>	12.7 °C (95% Ethanol)
<b>Flammability</b>	Highly flammable.
<b>Auto-Ignition Temperature</b>	422 °C (95% Ethanol)
<b>Flammable Limits - Lower</b>	3.3%
<b>Flammable Limits - Upper</b>	19.0%
<b>Molecular Weight</b>	346.38 (Gibberellic acid)

## 10. Stability and reactivity

<b>Chemical Stability</b>	Stable under normal temperatures and pressures. Vapour/air mixture explosive.
<b>Conditions to Avoid</b>	Incompatible materials, ignition sources, excess heat, oxidizers.
<b>Incompatible Materials</b>	Acetyl bromide, acetyl chloride, acids, acid chlorides, alkali metals, alkaline earth metals, alkali oxides, ammonia, anhydrides/acids, bromine pentafluoride, calcium hypochlorite, chromyl chloride, disulfuryl difluoride,

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**Hazardous Decomposition Products**  
ethylene oxide, fluorine, halogen-halogen compounds, hydrazine, hydrides, iodine heptafluoride, magnesium perchlorate, mercuric nitrate, mercury compounds, nitrosyl perchlorate, nonmetallic halides, oxidizing agents, perchloric acid, permanganic acid, peroxides, platinum, potassium dioxide, potassium-tert-butoxide, ruthenium (VIII) oxide, silver compounds, sodium, tetrachlorosilane + water, UF<sub>6</sub>, uranium hexafluoride, uranyl perchlorate.

**Possibility of hazardous reactions**  
Slightly reactive to reactive with oxidizing agents, acids.

**Hazardous Polymerization**  
Will not occur.

## 11. Toxicological Information

**Toxicology Information**  
No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. If mishandled or overexposed to this product the following symptoms or effects may occur.

**Acute Toxicity - Oral**  
LD50 (rat): > 5000 mg/kg (Gibberellic acid);  
LD50 (rat): 7060 mg/kg (Ethanol).

**Ingestion**  
May cause gastrointestinal irritation with nausea, vomiting and diarrhoea. May cause systemic toxicity with acidosis. May cause central nervous system depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure or cardiovascular collapse.

**Inhalation**  
May be irritating to the mucous membranes and respiratory tract. Inhalation of high concentrations may cause central nervous system effects characterized by nausea, headache, dizziness, unconsciousness and coma. May cause narcotic effects in high concentration. Vapors may cause dizziness or suffocation.

**Skin**  
Will have a degreasing action on the skin. May cause cyanosis of the extremities.

**Eye**  
Causes serious eye irritation. May cause painful sensitization to light. May cause chemical conjunctivitis and corneal damage.

**Respiratory sensitisation**  
Not classified based on available information.

**Skin Sensitisation**  
Not classified based on available information.

**Germ cell mutagenicity**  
Not classified based on available information.

**Carcinogenicity**  
Not classified based on available information.

**Reproductive Toxicity**  
Not classified based on available information.

**STOT-single exposure**  
Not classified based on available information.

**STOT-repeated exposure**  
Not classified based on available information.

**Chronic Effects**  
Repeated or prolonged skin contact may cause chronic dermatitis. Ethanol may cause reproductive and fetal effects. Laboratory experiments have resulted in mutagenic effects. Animal studies have reported the development of tumors. Prolonged exposure may cause liver, kidney, and heart damage. Gibberellic acid is a growth hormone that has been reported to have estrogenic and androgenic activity in animals. In reproduction studies in rats, no maternal or fetal to adverse effects to the fetus were noted following large dosages (1,000 mg/kg/day of gibberellic acid. The primary component is a central nervous system depressant. Repeated exposure at high concentrations (2.5% or greater in drinking water) Produced a variety of reproductive, fertility, and developmental effects in rats.

**Serious eye damage/irritation**  
Eye Damage/Irritation: Category 2A  
H319 Causes serious eye irritation.

**Mutagenicity**  
Not classified based on available information.

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## 12. Ecological information

<b>Persistence and degradability</b>	Abiotic degradation: Rapid degradation. (air) Biologic degradation: Biodegradation: 94 % modified OECD screening test; Readily biodegradable. BOD: 0.93-1.67 g/g; COD: 1.99 g/g; ThOD: 2.10 g/g; BOD 74 % of ThOD /5 d; COD 90 % of ThOD.
<b>Mobility</b>	Distribution: log P(oct): -0.32 (ethanol); log P(oct): -2.0 (gibberellic acid). No bioaccumulation is to be expected (log P(o/w) <1).
<b>Environmental Fate</b>	When released to the atmosphere ethanol will photodegrade in hours (polluted urban atmosphere) to an estimated range of 4 to 6 days in less polluted areas. Rainout should be significant.

## 13. Disposal considerations

<b>Disposal Considerations</b>	Whatever cannot be saved for recovery or recycling should be disposed of according to relevant local, state and federal government regulations. Empty containers should be forwarded to an approved agent for recycling. Avoid unauthorised discharge to sewer. Empty containers must be decontaminated.
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## 14. Transport information

<b>Transport Information</b>	Dangerous goods of Class 3 (Flammable Liquid) are incompatible in a placard load with any of the following: Class 1, Class 2.1, if both the Class 3 and Class 2.1 dangerous goods are in bulk, Class 2.3, Class 4.2, Class 5, Class 6, if the Class 3 dangerous goods are nitromethane, Class 7.
<b>U.N. Number</b>	1993
<b>UN proper shipping name</b>	FLAMMABLE LIQUID, N.O.S.
<b>Transport hazard class(es)</b>	3
<b>Hazchem Code</b>	•2YE
<b>Packing Group</b>	III
<b>EPG Number</b>	3A1
<b>IERG Number</b>	14

## 15. Regulatory information

<b>Regulatory Information</b>	All the constituents of this product are listed on the Australian Inventory of Chemical Substances ( AICS ), or exempted. Not listed under WHS Regulation 2011, Schedule 10 - Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals.
<b>Poisons Schedule</b>	Not Scheduled

## 16. Other Information

<b>Literature References</b>	'Standard for the Uniform Scheduling of Medicines and Poisons .', Commonwealth of Australia. National Road Transport Commission, 'Australian Code for the Transport of Dangerous Goods by Road and Rail 7th. Ed.'. Safe Work Australia, 'National Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals'. Standards Australia, 'SAA/SNZ HB 76:2010 Dangerous Goods - Initial Emergency Response Guide', Standards Australia/Standards New Zealand. Safe Work Australia, 'Hazardous Chemical Information System'. Safe Work Australia, 'National Code of Practice for the Labelling of Safe Work Hazardous Substances'. Safe Work Australia, 'National Exposure Standards for Atmospheric Contaminants in the Occupational Environment'.
<b>Contact Person/Point</b>	Paul McCarthy Ph. (08) 8440 2000 <b>DISCLAIMER STATEMENT:</b> All information provided in this data sheet or by our technical

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**Empirical Formula & Structural Formula**      C<sub>19</sub>H<sub>22</sub>O<sub>6</sub> (Gibberellic acid) + C<sub>2</sub>H<sub>6</sub>O (Ethanol)

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