


Safety Data Sheet

Activist Max™ SDS revision 01 4th March 2022

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name	Activist Max™
Other Names	None
Uses:	Plant food, activator and catalyst, for professional applicators
Chemical family	Inorganic mineral based plant nutrition
Chemical formula	Formulated product see section 3
Chemical name	Formulated product see section 3
Product description	Liquid fertiliser, for the correction/prevention of nutrient deficiencies
Contact details of the supplier of this Safety Data Sheet	
Company Name	Agrichem
Company address	2 Hovey Rd Yatala QLD 4207 Australia
Phone number	+ 61 7 3451 0000
Emergency contact	Poison Information Centre Australia – 13 11 26

2. HAZARD IDENTIFICATION

Poisons Schedule (Australian)	Not listed in SUSMP
Globally Harmonised System (GHS) Hazard classification	Hazardous substance according to the criteria of the GHS Classification and labelling of Chemicals (GHS) and Safe Work Australia code of practice, preparation of Safety Data Sheets for hazardous chemicals.
Hazard Category	Aquatic toxicity (chronic) category 1
Pictograms	
Signal word	Warning
Hazard Statements	H410 Very toxic to aquatic life with long lasting effects
Precautionary Statements	P273 Avoid release to the environment. P391 Collect spillage P102 Keep out of reach of children. P405 Store locked up.
National Transport Commission (Australian) Australian Code for the transport of Dangerous Goods by Road and Rail (ADG Code)	
Is Not a Dangerous Goods according to the criteria of the ADG Code for road or rail transport ref ADG Code, ref to chapter 14 of this SDS.	

3. INFORMATION ON INGREDIENTS

Ingredient	CAS Registry number	Proportion %w/w
Water	7732-18-5	To balance
Urea	57-13-6	<10
Zinc oxide	1314-13-2	<50

No other ingredients present which to the current knowledge of Agrichem & in the concentrations present are classified as hazardous to health and thereby require reporting in this chapter.

4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure

Swallowed	Rinse mouth with water. Do NOT induce vomiting unless told to do so by a medical doctor. Drink plenty of water / milk if possible. Never give anything by the mouth to an unconscious patient. Seek medical advice.
Eye	Immediately wash in and around the eye area with large amounts of water. Eyelids to be held apart. Check for contact lenses, remove if easy to do so. Seek medical attention.
Inhalation	Avoid breathing mist, spray or vapour. If inhaled, remove to fresh air. Get medical attention.
Important potential health effects, symptoms, effects, both acute and delayed	
Eye contact	No known significant effects or critical hazards
Inhalation	Exposure to decomposition products may cause a health hazard. Effects may be delayed following exposure.
Skin contact	No known significant effects or critical hazards
Ingestion	No known significant effects or critical hazards
Advice to Doctor	Treat symptomatically based on judgement of doctor and individual reactions of patient.
Medical Conditions Aggravated by Exposure	No Data Available

Have the product container or label with you when calling the Poison Information Centre or a doctor or going for treatment.

5. FIRE FIGHTING MEASURES

General measures	Clear area of all non-emergency personnel. Stay upwind. Keep out of low areas. Eliminate ignition sources. Move fire exposed containers from fire area if it can be done without risk.
Flammability conditions	Non-combustible, aqueous suspension.
Extinguishing Media	Use any means suitable for extinguishing surrounding fire.
Fire and Explosion Hazard	Non-combustible. Containers if heated, resultant increase in pressure may cause container to burst.
Hazardous Products of Combustion	May include: nitrogen oxides, ammonia, carbon mono and dioxide.
Special Fire Fighting Instructions	Do NOT allow fire fighting water to reach waterways, drains or sewers. Store fire fighting water for treatment.
Personal Protective Equipment	Fire fighters should wear a positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots and gloves).
Flash point	No data available
Lower Explosion Limit	No data available
Upper Explosion Limit	No data available
Auto ignition Temperature	No data available
Hazchem Code	●3Z

6. ACCIDENTAL RELEASE MEASURES

General Response Procedures	Avoid accidents, clean up immediately. Slippery when spilt. Increase ventilation. Avoid generating dust from dried product. Stop leak if safe to do so. Isolate the danger area.
Clean up Procedures	<p>Land spill: Dike spill with using absorbent or impervious materials such as earth, sand or clay. Vacuum, shovel, pump or sweep up the product and place in containers for disposal in accordance with applicable local regulations. Avoid contamination of water bodies during clean up and disposal. See containment section below.</p> <p>Spillage into water. Where possible, remove any intact containers from the water. Advice to local water authority that none of the affected water should be used for irrigation or for the abstraction of potable water until natural dilution returns water to normal environmental background levels.</p>
Containment	Stop Leak if safe to do so. Isolate the danger area. Dike and absorb spill using inert absorbent materials such as earth, sand, clay, zeolite, or diatomaceous earth
Environmental Precautionary Measures	DO NOT let product reach drains or waterways. If product does enter a waterway, advise the Environmental Protection Authority and local Waste Management. The product is insoluble in water (see section 12)
Evacuation Criteria	Evacuate all unnecessary personnel from immediate area
Personnel Precautionary Measures	Personnel involved in the clean-up should wear protective clothing as listed in section 8.

7. HANDLING AND STORAGE

Handling	Prevent against physical damage. Wash hands after handling this material. Good housekeeping, splash and dust (when product dries) prevention procedures should be followed to minimize exposure and accumulation. Ensure an eye bath and safety shower are available and ready for use. Observe good personal hygiene practices and recommended procedures. Avoid contact with eyes, skin and clothing. Do not inhale product mist, spray or fumes. Your supplier can advise you on safe handling, please contact the supplier.
Storage	Store in a cool, dry, well-ventilated area. Keep containers tightly closed if not in use. Inspect regularly for hazards such as damage or leaks. Protect against physical damage. Store away from incompatible materials as listed in section 10. Do not store with food stuffs. Use good housekeeping practices to prevent accumulation of product and follow sound cleaning techniques that will prevent contamination. Dry indoor storage is recommended. Provide appropriate ventilation and store containers such as to prevent any accidental damage.
Container	Store in original packaging as approved by manufacturer

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General	No specific exposure standards has been established for this product by Safe Work Australia
Exposure Limits for Zinc Oxide	TWA 5 mg/m ³ 10 min STEL 10mg/m ³
Biological limits	No information on biological limit values available for this product.
Engineering Measures	A system of local and or general exhaust is recommended to keep employee exposure as low as possible. Local exhaust extraction / ventilation is preferred as it controls emissions at the source preventing dispersion of the general work

	area. Adequate ventilation should be provided so that exposure limits are not exceeded.
Personal Protection Equipment PPE	RESPIRATOR: Respirators should be used for conditions of use where exposure to spray or mist is apparent and engineering controls are not feasible.
	EYES: Use chemical safety goggles. Maintain eye wash fountain and quick drench facilities in work area (AS1336/1337). An emergency eyewash or water supply should be readily accessible to the work area.
	HANDS: Gloves, chemical resistant (AS2161).
	CLOTHING: Lab coat, apron or coveralls and safety footwear (AS3765/2210).
Work Hygienic practices	Thoroughly wash hands, forearms and face after using product, prior to eating, smoking using toilet or at end of work period. Contaminated clothing to be laundered prior to re-use

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Liquid suspension
Appearance	Opaque
Odour	Slight, characteristic
Colour	Off white to light brown
pH	8.5 – 10.0
Vapour pressure	No Data Available
Relative vapour density	No Data Available
Boiling point	>100 degrees Celsius
Melting point	No Data Available
Freezing point	No Data Available
Solubility in water	Largely insoluble
Specific gravity	1.77 – 1.79
Flash point	No Data Available
Auto ignition temp	No Data Available
Decomposition temp	No Data Available
Molecular weight	No Data Available
Particle size	No Data Available
Particle size distribution	<150 µm
Viscosity	>800 centipoise
Note: Physical data are typical values but may vary from sample to sample. A typical value should not be construed as a guaranteed analysis or as a specification.	

10. STABILITY AND REACTIVITY

General Information	This product is stable under normal handling and storage conditions.
Chemical Stability	Stable under ordinary conditions.
Conditions to Avoid	Excessive heat, do not store near heat or flames.
Materials to Avoid	<ol style="list-style-type: none"> 1. Strong acids - can react 2. Strong oxidising agents – may decompose 3. Strong reducing agents – may decompose
Hazardous Products of Decomposition	Under normal handling and storage, decomposition is not expected. See chapter 5 for further comments re involvement in fire.
Hazardous Polymerisation	No Data Available

11. TOXICOLOGICAL INFORMATION

General Information	No deleterious effects expected if product is handled in accordance with this Safety Data Sheet and product label. Health effects may arise if product is mishandled
Eye Irritant	No known significant effects or critical hazards
Ingestion	No known significant effects or critical hazards
Inhalation	No known significant effects or critical hazards
Skin Irritant	No known significant effects or critical hazards

Reproduction	No known significant effects or critical hazards
Carcinogen Category	No known significant effects or critical hazards
Information on toxicological effects by ingredients where available	
Urea	Oral LD ₅₀ >8471 mg/kg in the Rat
Zinc Oxide	Oral LD ₅₀ 7950 mg/kg in the mouse Oral LD ₅₀ 25mg/m ³ in the rat

12. ECOLOGICAL INFORMATION




General Ecotoxicity	Very toxic to aquatic life with long lasting effects
Algal toxicity	No Data Available
Invertebrate toxicity	No Data Available
Persistence/ Degradability	The methods for determining biological degradability are not applicable to inorganic substances.
Mobility	Largely water insoluble.
Environmental Fate	Do NOT let product reach waterways, drains and sewers
Bioaccumulation	No Data Available
Environmental impact	No Data Available
Information on ecological effects by ingredients where available	
Urea	Toxicity threshold: Scenedesmus quadricauda (green algae) >10,000 mg/l, toxic effect: multiplication inhibition of cell
Zinc Oxide	LC50 5.5mg/L on Daphnia at 96hours - source HSDB LC50 320ppm on Bluegill sunfish @ 96hr – source HSDB LC50 1.1ppm on Rainbow Trout @ 96hr – source HSDB EC50 1000ppm on Water flea (crustacea) @ 48hr – source HSDB

13. DISPOSAL CONSIDERATIONS

General Information	Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.
Special Precautions for Landfill	Small quantities of this product can usually be disposed of at Liquid Waste Disposal sites. No special disposal treatment is required, but local authorities should be consulted about any specific local requirements. Larger volumes of this product are not recommended to be sent to Liquid Waste Disposal sites. Such product should, if possible, be used for an appropriate application.

14. TRANSPORTATION INFORMATION

Land Transport, Australian Dangerous Goods Code (ADG Code) for transport by road and rail.	
DG classification	The UN number for this product is 3082 however the product IS Not a Dangerous Goods, by the criteria of ADG Code 7.7, 3.3.3 special provision SP no. AU01. <i>Environmentally Hazardous Substances meeting the descriptions of UN 3077 or UN 3082 are not subject to this Code when transported by road or rail in;</i> <i>(a) packagings that do not incorporate a receptacle exceeding 500 kg(L);</i> or <i>(b) IBCs.</i>
Hazchem code	●3Z

Regulation: ADR/RID	
UN number	3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (zinc oxide)
Transport hazard class (es)	9 
Packaging group	III
Environmental hazard	Yes
Additional information Hazard identification number	90
Regulation: IMDG	
UN number	3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (zinc oxide)
Transport hazard class (es)	9 
Packaging group	III
Environmental hazard	Yes
Marine pollutant	Yes
Air transport: International Air Transport Association (IATA)	
UN number	3082
UN Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (zinc oxide)
Transport hazard class (es)	9 
Packaging group	III
Environmental hazard	Yes
Marine pollutant	Yes

15. REGULATORY INFORMATION

General information	The UN number for this product is 3082 however the product is not a dangerous goods, by the criteria of ADG Code 7.7, 3.3.3 special provision SP no. AU01.
Poisons Schedule	Not listed in SUSMP

16. OTHER INFORMATION

The information contained in this SDS is by way of general comment only. Because conditions of use, suitability of product and application conditions are beyond the control of Agrichem, this SDS does not offer any advice in respect to any product. The authors and Agrichem Manufacturing Industries Pty Ltd hereby disclaim any liability to any person, property, or thing in respect of any consequence of anything done or omitted to be done by any person in reliance, whether wholly or in part, upon whole or part of the contents of this SDS.

KEY

< Less than

> Greater than

a.i. Active ingredient

ADG Code Australian dangerous goods code

AICS Australian Inventory of Chemical Substances

ATE Acute toxicity estimation

atm Atmosphere

CAS Chemical Abstract Service (registry number)

Cm² Square Centimetres

CO₂ Carbon Dioxide

deg C (°C) Degrees Celsius

EPA Environmental Protection Agency based in each state of Australia

g Grams

g/cm³ Grams per Cubic Centimetre

g/l Grams per Litre

GRAS Generally recognised as safe

HSIS Hazardous substances information system

HSNO Hazardous substances and New Organism

HDPE High density polypropylene

IDLH Immediately Dangerous to Life and Health

Immiscible Liquid are insoluble in each other

inHg inch of Mercury

InH₂O Inch of Water

K Kelvin

kg Kilogram

kg/m³ Kilogram per Cubic Metre

LC₅₀ LC stands for lethal concentration, LC₅₀ is the concentration of a product in air that will cause the death of 50% of a population of test animals. Product is normally inhaled for between 1 and more typically 4 hours

LD₅₀ LD stands for lethal dose. LD₅₀ is the amount of product given in a single dose, causing death in 50% of a population of test animals.

LDLo The lowest amount of a solid or liquid material reported to have caused the death of animals or humans

m³ Cubic Metre

mbar Millibar

mg Milligram

mg/24H Milligrams per 24 hours

mg/kg Milligrams per Kilogram

mg/m³ Milligrams per Cubic Metre

Misc or Miscible Liquids from one homogeneous liquid phase regardless of the amount of either component present

mm Millimetre

mmH₂O Millimetres of Water

mPa.s Millipascals per Second

MSHA Mine safety and health administration

N/A Not Applicable

NIOSH National Institute for Occupational Safety and Health

NOHSC National Occupational Health and Safety Commission

OECD Office for Economic Co-operation and Development

PEL Permissible Exposure Limit

Pa Pascal

ppb Parts per Billion

PPE personal protective equipment

ppm Parts per Million

ppm/2h Parts per million per 2 hours

ppm/6h Parts per million per 6 hours

psi Pounds per square inch

R Rankine

RCP Reciprocal Calculation Procedure

SCBA Self Contained Breathing Apparatus

SWA Safe Work Australia

STEL Short Term Exposure Limit

SUSMP Standard for the uniform scheduling of medicines and poisons

TVL Threshold Limit Value

TWA Time Weighted Average

UN United Nations

wt Weight

End of SDS