


Safety Data Sheet

Supa Moly™ SDS revision 03 - 7 October 2022

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION	
Product Name	Supa Moly™
Other Names	None
Uses:	Plant food, activator and catalyst, for professional applicators
Chemical family	Inorganic mineral based plant nutrition
Chemical formula	Not available, compounded product see section 3
Chemical name	Not available, compounded 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
Phone number	+ 61 7 3451 0000
Emergency contact	Poison Information Centre Australia – 13 11 26
2. HAZARD IDENTIFICATION	
Poisons Schedule (Australian)	Schedule 5
Globally Harmonised System (GHS) Hazard classification	Hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS)
Hazard Category	Skin Corrosion – Category 1B Serious eye damage – Category 1
Pictograms	 Corrosive
Signal word	Danger
Hazard Statements	H314 Causes severe skin burns and eye damage P101 If medical advice is needed, have product container or label on hand.
Prevention	P260 Do not breathe mist/spray P264 Wash hands and contaminated skin thoroughly after handling P273 Avoid release to the environment P270 Do not eat, drink, or smoke when using this product P280 Wear protective gloves, protective clothing and eye protection. P308+313 IF exposed or concerned: Get medical advice.
Response	P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.
Storage	P405 Store locked up
Disposal	P501 Dispose of contents / container in accordance with local/regional/national international regulations
Dangerous Goods Classification	According to the criteria of the ADG Code this product is a Dangerous Goods

3. INFORMATION ON INGREDIENTS		
Ingredient	Identifiers	Proportion %w/w
Phosphomolybdic acid	CAS: 12026-57-2 EC: 234-713-5	≥30 – 60
Phosphoric Acid	CAS: 7664-38-2 EC: 231-633-2	≥10 – 30

No other ingredients present which to the current knowledge of Agrichem & in the concentrations present are classified as hazardous and thereby require reporting in this section.
Any value shown as a range is to preserve confidentiality or is due to batch variation.

4. FIRST AID MEASURES	
Description of necessary measures according to routes of exposure	
Swallowed	Rinse mouth with water. Seek medical treatment.
Eye	Immediately flush eyes with plenty of water for several minutes, lifting lower and upper eyelids occasionally. Get medical advice.
Inhalation	Remove to fresh air. If not breathing give artificial respiration. If breathing is difficult give oxygen. Call a doctor / physician.
Skin	Remove any contaminated clothing. Wash skin with soap or mild detergent and water for several minutes. Get medical attention if irritation develops or persists. Wash clothing before re-use.
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 fire 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
Extinguishing Media	Use any means suitable for extinguishing surrounding fire.
Fire and Explosion Hazard	Non-combustible.
Hazardous Products of Combustion	Phosphorus oxides and or Molybdenum oxides
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	2R

6. ACCIDENTAL RELEASE MEASURES	
General Response Procedures	Avoid accidents, clean up immediately. Slippery when spilt. Eliminate all sources of ignition. Increase ventilation. Avoid generating dust from dried product. Stop leak if safe to do so. Isolate the danger area. Use clean non sparking tools and equipment.


Clean up Procedures	<p>Land spill:</p> <p>Collect the product and place in containers for disposal in accordance with applicable local regulations. Dike spill using absorbent or impervious materials such as earth, sand, soil, vermiculite or diatomaceous earth. Avoid contamination of water bodies during clean up and disposal.</p> <p>Spillage into water:</p> <p>Where possible, remove any intact containers from the water. Advise 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 the elements listed in section 3 to its normal environmental background level.</p>
Containment	Stop Leak if safe to do so. Isolate the danger area
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 water soluble and high concentrations cause damage to plant roots and foliage via absorption. (see section 12)
Evacuation Criteria	Evacuate all unnecessary personal
Personnel Precautionary Measures	Personnel involved in the clean-up should wear full protective clothing as listed in section 8.

7. HANDLING AND STORAGE

Handling	Prevent against physical damage. Wash hands after handling this material. Avoid contact especially when skin is cut or abraded. 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. Wash thoroughly after handling. 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. Apply above handling advice when mixing with other substances. No special handling precautions are required.
Storage	Store in a cool, dry, well-ventilated area. Keep containers tightly closed when 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. Use good housekeeping practices to prevent accumulation of product and follow sound cleaning techniques that will keep airborne particulates at a low level. Dry indoor storage is recommended. Provide appropriate ventilation and store containers such as to prevent any accidental damage. This product is not listed in the Australian Code for the Transport of Dangerous Goods by Road and Rail.
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	Molybdenum (Mo) and its compounds	Safe Work Australia TWA is 5mg/m ³ calculated as Mo
	Phosphoric Acid	Safe Work Australia TWA is 1mg/m ³ STEL is 3mg/m ³
Biological limits	No information on biological limit values 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
Appearance	Translucent
Odour	Slight, characteristic
Colour	Yellow
pH	3.5-4.5
Vapour pressure	No Data available
Relative Vapour Density	No Data available
Boiling point	>100 degrees Celsius
Melting point	<-8 deg C
Freezing point	<-8 deg C
Solubility in water	Not applicable to aqueous solutions
Specific gravity	1.55 – 1.60
Flash point	No Data Available
Auto Ignition Temp	No Data Available
Decomposition temp	No Data Available
Viscosity	No Data Available
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	Reaction with strong reducing agents such as metal hydrides or alkali metals, may release ammonia.
Chemical Stability	Stable under ordinary conditions of use and storage.
Conditions to Avoid	Excessive heat. Do not store near heat, spark or flame.
Materials to Avoid	<ol style="list-style-type: none"> 1. Strong bases – will react 2. Strong oxidising agents – may decompose 3. Metals – is corrosive to most
Hazardous Products of Decomposition	Oxides of phosphorus and molybdenum may be released

11. TOXICOLOGICAL INFORMATION

General Information	Oral LD ₅₀ : >5000 mg/kg based on ATE Inhalation LC ₅₀ : No Data Available
Eye Irritant	Serious eye damage / eye irritation with possible burns and permanent injury.
Ingestion	May be harmful if swallowed.
Inhalation	May be harmful if inhaled. Causes respiratory tract irritation.
Skin Irritant	Causes skin irritation and possible burns.
Reproduction	No Data Available
Carcinogen Category	No Data Available

12. ECOLOGICAL INFORMATION

Phytotoxicity	The nutrients in the product are essential micronutrients for healthy growth of plants, however, it can be harmful to molybdenum / phosphate sensitive plants in higher quantities. Care should be taken to minimise the amount of product released to the environment. Follow the direction on product label for safe and effective application rates to a range of crops.
Algal toxicity	No Data Available
Invertebrate toxicity	No Data Available
Persistence/ Degradability	The mineral elements present in the product are all essential to plants, and therefore consumed in support of plant / crop growth and development
Mobility	The Molybdenum and Phosphate present in the product are Anions with negative electrical charges. As soils platelets are negatively charged, the repulsion of like charges means Boron and Molybdenum are leachable to ground water.
Environmental Fate	Do NOT let product reach waterways, drains and sewers
Bioaccumulation	No Data Available
Environmental impact	No Data Available

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	
Proper Shipping Name	PHOSPHORIC ACID, SOLUTION
Class	8
ERG	37
UN Number	1805
Packaging group	III
Comments	Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.
Regulation: IMDG	
UN number	1805
UN proper shipping name	PHOSPHORIC ACID, SOLUTION
Transport hazard class (es)	8
Packaging group	III
EMS	F-A, S-B

Marine pollutant	No
Comments	Classified as Dangerous Goods by the criteria of the International Marine Dangerous Goods Code (IMDG Code) Dangerous Goods Regulations for transport by sea; DANGEROUS GOODS.
Regulation: IATA	
UN number	1805
UN proper shipping name	PHOSPHORIC ACID, SOLUTION
Transport hazard class (es)	8
Packaging group	III
Environmental hazard	No
Comments	Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; DANGEROUS GOODS.

15. REGULATORY INFORMATION

General information	All ingredients listed on AICS
Poisons Schedule	Schedule 5 Poison

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 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

End of SDS

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