GHS Hazardous Chemical, Not Dangerous Goods.

Kendon MCPA 500 Herbicide

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

IDENTIFICATION

Product Name: Kendon MCPA 500 Herbicide

Other Names: MCPA Dimethylamine Salt and Water solution.

Product Code(s): 5L, 10L, 20L

USE: For the control of broadleaf weeds in cereals, linseed, pastures; sugar

cane and turf as per the Directions For Use.

COMPANY DETAILS: Kendon Chemical & MNFG. Co. Pty Ltd

A.B.N. 27 004 281 967 8-10 Abbot Street Fairfield, Victoria 3078

Phone: 03 9497 2822 Fax: 03 9499 7225

Emergency Telephone No: Business Hrs 03 9497 2822

After Hrs 0418-530-461 (General Manager)

0409-577-174 (Technical Manager)

2. HAZARD IDENTIFICATION

EMERGENCY OVERVIEW: Clear reddish-brown liquid with an Ammoniacal odour.

Harmful if swallowed. Causes skin irritation. Causes serious eye damage.

Avoid contact with skin and eyes. Do not inhale the spray mist.

Target Organs: Eye, Skin, Liver, Kidney.

Dangerous Goods Information: Not Dangerous Goods according to the ADG Code,

IMDG Code, nor IATA Regulations.

GHS Hazardous Chemical Information:

Classified as a Hazardous Chemical to the Australian GHS Criteria.

Signal Word: DANGER

Classification: Acute Toxicity – Oral – Hazard Category 4

Skin Corrosion / Irritation — Hazard Category 2 Serious Eye Damage/Irritation — Hazard Category 1

Hazard Harmful if swallowed.

Statements: Causes skin irritation.

Causes serious eye damage.

Causes serious eye

Precautionary Statements

Prevention Wear protective gloves, eye protection / face protection.

Avoid breathing dust / mist / spray.

Use only outdoors or in a well-ventilated area. Wash hands thoroughly after handling.

Do not eat, drink or smoke when using this product.

- Response IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

Rinse mouth.

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IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

Immediately call a POISON CENTER or doctor/physician.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for

Take off contaminated clothing and wash before reuse.

Store in a well-ventilated place. Keep container tightly closed - Storage

- Disposal Dispose of contents / container in accordance with the Local, State & Federal EPA waste

regulations.

Hazardous Substance [for information only]

Harmful, Irritant [for information only]

Harmful if swallowed. Irritating to skin. Risk of serious eye damage. [for information only]

SUSDP Poison Schedule: S6 POISON

ACUTE HEALTH EFFECTS

Swallowed: Harmful if swallowed. Likely to cause irritation to mouth, throat and stomach with effects

> including mucous build up, irritation to the tongue and lips and pains in the stomach. May cause loss of appetite, loss of weight, vomiting, depressions, general tenseness and

muscular weakness.

Eve: Causes serious eye damage, with effects including: tearing, pain, stinging and blurred

vision. Prolonged contact may cause serious eye damage.

Skin: Causes skin irritation, with effects including; redness, and itchiness.

May be harmful by skin contact. May cause an allergic reaction in sensitive persons.

Inhaled: Mists may cause irritation to the nose, throat and respiratory system with effects including

dizziness and headache. May be harmful if inhaled.

Chronic: Repeated skin contact may cause allergic reactions.

Prolonged or repeated skin contact may lead to dermatitis.

3. COMPOSITION / INFORMATION ON INGREDIENTS

SUBSTANCE NAME **Proportion CAS Number** 2-Methyl-4-Chlorophenoxyacetic Acid, Dimethylamine Salt (1:1) 54% w/v * 2039-46-5 46% w/v 7732-18-5

Water

* 500 g/L as MCPA

Note: Dimethylamine (CAS: 124-40-3) may be released under alkaline conditions.

4. FIRST AID MEASURES

Swallowed: If swallowed, DO NOT induce vomiting. Give a glass of milk or water. Seek medical assistance immediately.

Eye: If material is splashed into eyes, immediately flush with plenty of water for 15 minutes, ensuring eye lids are held open. If irritation persists transport to hospital or doctor.

Skin: If material is splashed onto the skin, remove any contaminated clothing and wash skin thoroughly with water and soap if available. If irritation persists transport to hospital or doctor.

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Inhaled: Move victim to fresh air. Apply resuscitation if victim is not breathing.

Open all doors, windows and/or vents.

First Aid Facilities: Eye wash fountain, safety shower and normal wash room facilities nearby. **Advice to Doctor:** Treat symptomatically. Contact the Poisons Information Centre 13 1126.

5. FIRE-FIGHTING MEASURES

Extinguishing Media: Water fog, foam, Carbon Dioxide, dry powder, or suitable for the surrounding area.

Procedures: If safe to do so, move undamaged containers from fire area. Contain any fire water run-off.

Protective Equipment: Fire fighters to wear Self-Contained Breathing Apparatus (SCBA) if exposed to products of decomposition. Full protective clothing is also recommended.

Flammability: This material is not readily combustible due to the 46% water content.

Fire/Explosion Hazard: Not an explosion hazard due to the 46% water content.

Hazardous Decomposition Products: Harmful and toxic partial decomposition products may formed under fire conditions. Decomposes in fires further to Hydrochloric Acid, Oxides of Nitrogen (NOx) and Carbon Monoxide.

6. ACCIDENTAL RELEASE MEASURES

Spillage: Ventilate the area. Keep unnecessary people away from spill area. Wear protective equipment. Slippery when spilt.

Contain using absorbent, sand or soil - prevent run off into drains and waterways. Use absorbent (soil, sand, vermiculite or other inert material). Collect and seal in properly labelled containers for disposal. Ensure all residues of material are recovered before finally washing the area to sewer with plenty of water to thoroughly dilute it to below levels which will have adverse effects.

HANDLING AND STORAGE

Handling: Avoid contact with skin and eyes. Do not inhale the spray mist.

Do not mix more than is needed. Use all the prepared spray. DO NOT store any unused spray mix. Do not spray outdoors under windy conditions. Avoid spray drift contacting foliage or roots of neighbouring trees, shrubs, flowers and vegetables. Do not use on new lawns (<3 months old). Wash the sprayer thoroughly after use. Do NOT allow the chemical spray or rinsate to get into drains, sewers, streams or ponds.

Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. Do Not dispose of undiluted chemicals on site.

If recycling, replace the cap and return the clean containers to the recycler or designated collection point.

State & Territory regulations require that people who use pesticides in their job or business must have training in the application of these materials.

Storage: Store in a cool place and out of direct sunlight. Keep containers closed, when not using the product. Store in original packages as approved by manufacturer.

Store & handle in accordance with Work Health & Safety Regulations or Occupational Health & Safety Regulations.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Standards
MCPA Dimethylamine Salt (1:1)
Dimethylamine (if released)

No Exposure Standard available 2 ppm 3.8 mg/m3 TWA 6ppm 11 mg/m3 STEL

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Personal Protection Equipment

Avoid skin, eye and inhalation contact.

GLOVES: Impervious gloves (e.g. PVC or Rubber).

EYES: Chemical goggles, faceshield or safety glasses with side shields to protect eyes.

RESPIRATORY PROTECTION: Avoid breathing of vapours or mists. Normally natural ventilation is sufficient when handling the concentrate and preparing spray solution. If natural or local exhaust ventilation is not adequate, select and use an organic vapour respirator in accordance with AS/NZS 1715/1716. CLOTHING: Wear overalls and long sleeved clothing, apron or splash suit from PVC or Rubber.

Wash with soap and water. Always wash hands before smoking, eating, drinking or using the toilet. After each day's use, wash contaminated clothing and safety equipment.

Engineering Controls

Maintain adequate ventilation at all times. In most circumstances natural ventilation systems are adequate unless the material is heated, then the use of a local exhaust ventilation system is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear reddish-brown liquid with an ammoniacal odour.

Boiling Point 100°C approx.

Melting Point: 0°C approx.

pH 8-10

Vapour Pressure: As for water. Specific Gravity: 1.12-1.14

Solubility: The solution can be further diluted with water.

Flash Point: Not applicable (46% water solution)

Flammability Limits: Not applicable

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions of use.

Conditions to Avoid: Heat. Flames. Avoid exposure to direct sunlight.

Incompatible Materials: Alkalis, Acids, Oxidizing Agents.

Strong alkalis such as caustic soda (or even lime) will liberate Dimethylamine vapour.

Dimethylamine is harmful and corrosive by inhalation and has a fishy odour.

Reaction with Acids will precipitate solid MCPA which can cause blockages in spray equipment.

Hazardous Decomposition Products: May release Dimethylamine under strongly Alkaline conditions. Harmful and toxic partial decomposition products may be formed under fire conditions. Decomposes in fires further to Hydrochloric Acid, Oxides of Nitrogen (NOx) and Carbon Monoxide.

Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Overall Product: Harmful if swallowed. Causes serious eye damage. Irritating to skin. No overall data available. See below for Toxicological Data on the chemicals MCPA, and Dimethylamine released by this product.

MCPA (as 100%):

Acute Oral Toxicity LD_{50} (rat): 700-1160 mg/kg Acute Dermal Toxicity LD_{50} (rabbit): >4000 mg/kg Acute Inhal'n Toxicity LC_{50} (rat, 4hrs): >6.36 mg/L

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Reproductive Effects: The reproductive function was affected at doses up to 15mg/day/kg in a two generation

rat study. Doses at <15mg/kg/day were toxic to foetuses. Dogs receiving 8 and 16mg/kg

of MCPA for 13 weeks showed adverse changes to the sperm and testes.

Teratogenic Effects: Offspring of pregnant rats fed 20 to 125 mg/kg on days 6 to 15 of gestation had no

birth defects. Mice fed 100 mg/kg/day on days 6 to 15 showed significantly reduces

foetal weight and delayed bone development.

Mutagenic Effects: Bacterial (with and without metabolic activation) - Negative

Spot Tests - Negative. Host Mediated Tests - Negative

Hamsters – it is reportedly weakly mutagenic to bone marrow and ovarian cells.

Carcinogenic Effects: Available evidence indicates that MCPA does not cause cancer.

Organ Toxicity: Skin, Eye, Liver, Kidneys, Spleen and Thymus. Farm worker exposure has resulted in

reversible anemia, muscular weakness, digestive problems, and slight liver damage.

Fate in Humans: The major metabolite is 2-Methyl-4-Chlorophenol in the free and conjugated form,

which is formed in the liver. Humans excreted about half of a 5mg dose in the urine

within a few days. No residues were found after day 5.

The Australian Acceptable Daily Intake (ADI) for MCPA for a human is 0.01 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 1.1 mg/kg/day, the level determined to show no effects during long term exposure for the most sensitive indicators and the most sensitive species.

(Ref: Comm. Dept. of Health and Ageing, 'ADI List', TGA).

MCPA Dimethylamine salt (as 100%):

Eye Irritation (rabbit): Severe eye irritation
Skin Irritation (rabbit): Moderate skin irritation

Sensitisation: Not available

Dimethylamine (as 100%):

Acute Oral Toxicity LD₅₀ (Rat): 698 mg/kg Acute Oral Toxicity LD₅₀ (Mouse) 316 mg/kg Acute Oral Toxicity LD₅₀ (Guinea Pig): 240 mg/kg 240 mg/kg Acute Oral Toxicity LD₅₀ (Rabbit): Acute Skin Toxicity LD50 (Rat): 3900 mg/kg Acute Inhal'n Toxicity LD₅₀ (Rat): 4700 ppm/4 hour Acute Inhal'n Toxicity LD₅₀ (Rat): 4540 ppm/6 hr Eye Irritation Causes eye irritation Respiratory Irritation Causes respiratory irritation Skin Irritation Causes skin irritation

12. ECOLOGICAL INFORMATION

MCPA Dimethylamine Salt products do not appear to pose any threat to birds or any threat to fish or other aquatic organisms other than in very high concentrations. This substance should be handled as if it may be harmful to aquatic organisms. Avoid contaminating waterways.

MCPA Dimethylamine Salt (as 100%):

Acute Aquatic Fish Toxicity Fish: LC_{50} (rainbow trout, 96hrs) : 117-232 mg/L Acute Aquatic Daphnia Toxicity LC_{50} (Daphnia Magna, 48hrs) : >190 mg/L Acute Aquatic Algal Toxicity LC_{50} (Algae) : >392 mg/L Acute Bird Oral Toxicity LD_{50} (bobwhite quail) : 270 mg/kg MCPA DMA is practically non-toxic to Bees - Acute Oral Toxicity LD_{50} : >200 μ g/bee See below for Data on the chemicals MCPA and Dimethylamine released by this product.

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MCPA (as 100%):

In soil: DT50 (half life): < 7 days. Duration of residual activity is 3-4 months Acute Aquatic Fish Toxicity Fish: LC_{50} (rainbow trout, 96hrs): 117-232 mg/L LD_{50} (bobwhite quail): 377 mg/kg

MCPA is practically non-toxic to freshwater invertebrates.

MCPA is practically non-toxic to Bees – Acute Oral Toxicity LD50: 109 μg/bee

Octanol Water Partition Co-efficient log Pow: -0.71

Dimethylamine (as 100%):

Dimethylamine is expected to biodegrade in water surfaces.

Acute Aquatic Fish Toxicity LC_{50} (Rainbow Trout) : Not available Acute Aquatic Daphnia Toxicity LC_{50} (Daphnia Magna, 24hrs) : Not available

13. DISPOSAL CONSIDERATIONS

Disposal: In accordance with the Local, State & Federal EPA waste regulations.

Advise its harmful, irritant and herbicidal nature. Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to an approved waste facility.

The ingredients will need to be reacted and/or separated from the water.

If recycling return the clean containers to the recycler or designated collection point.

Processing, use or contamination of this product may change the waste management options.

The unclean container must also be handled as hazardous waste until cleaned.

14. TRANSPORT INFORMATION

Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code); or by air according to the IACO (IATA Regulations), or by sea according to the IMO (IMDG Code).

UN Number: Not Dangerous Goods

Proper Shipping Name: Not Applicable
Dangerous Goods Class: Not Applicable
Subsidiary risk: Not applicable
Packing Group: Not Applicable
Hazchem Code: Not Applicable

Dangerous Goods - Initial Emergency Response Guide (SAA/SNZ HB76): Not Applicable

Marine Pollutant to IMDG Code: No

15. REGULATORY INFORMATION

GHS Hazardous Chemical Information:

Classified as a Hazardous Chemical to the Australian GHS Criteria.

Signal Word: DANGER

Classification: Acute Toxicity – Oral – Hazard Category 4

Skin Corrosion / Irritation — Hazard Category 2

Serious Eye Damage/Irritation – Hazard Category 1





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Hazard H302 - Harmful if swallowed. **Statements:** H315 - Causes skin irritation.

H318 - Causes serious eye damage.

Precautionary Statements

- **Prevention** P280 - Wear protective gloves, eye protection / face protection.

P261 - Avoid breathing dust / mist / spray.

P271 - Use only outdoors or in a well-ventilated area.

P264 - Wash hands thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.

- Response P301+312 - IF SWALLOWED:

Call a POISON CENTER or doctor/physician if you feel unwell.

P330 - Rinse mouth.

P302+352 - IF ON SKIN: Wash with plenty of soap and water. P332+313 - If skin irritation occurs: Get medical advice/attention.

P305+351+338 - 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.

P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position

comfortable for breathing.

P362+P364 - Take off contaminated clothing and wash before reuse.

- Storage P403+233 - Store in a well-ventilated place. Keep container tightly closed

- Disposal P501 - Dispose of contents / container in accordance with the Local, State & Federal EPA

waste regulations.

Hazardous Substance [for information only]

Harmful, Irritant [for information only]

Harmful if swallowed. Irritating to skin. Risk of serious eye damage. [for information only]

Harmful, Irritant due to the MCPA Dimethylamine Salt

Not Dangerous Goods according to the ADG Code, IMDG Code, nor IATA Regulations.

Scheduled Poison S6 (Active ingredients MCPA is listed in the SUSMP) POISON

NICNAS - Aust. Inventory of Chemical Substances: All ingredients are on the AICS.

APVMA Approval No: 60033/5L/0306; 60033/10L/0306; 60033/20L/0306

16. OTHER INFORMATION

SDS Dates and Revisions

SDS Original Preparation Date : 20 Sept 2006, 30 Sept 2010, 22 July 2015

SDS Latest Revision Date : 24th July 2019

Sections Changed in Latest Revision : Changes in 2, 11, 15, 16.

Contact Point: phone: (03) 9497 2822 email: CStory@Kendon.com.au

mobile: 0418-530-461 (General Manager) mobile: 0409-577-174 (Technical Manager)

SDS APPROVED: Kendon

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Acronyms Used

ADG Code Australian Dangerous Goods Code for the Transport of Dangerous Goods by Road & Rail

Safe Work Australia ASCC became Safe Work Australia in April 2009.

Safe Work Australia administers ASCC & NOHSC documents.

HCIS Hazardous Chemicals Information System at: http://hcis.safeworkaustralia.gov.au/

NZ EPA HSNO

Environmental Risk Management Authority New Zealand, HSNO Chemical

CCID

Classification Information Database.

00.5

https://www.epa.govt.nz/database-search/

e-ChemPortal

Global Portal to Information on Chemical Substances

http://www.echemportal.org/echemportal/index?pageID=0®uest_locale=en

ECHA

European Chemicals Agency at http://echa.europa.eu/

ECHARSD

ECHA Registered Substances Database (with SIEF results of chemical reviews)

http://echa.europa.eu/information-on-chemicals/registered-substances

ECHA C&LI

ECHA Classification & Labelling Inventory Database

http://echa.europa.eu/information-on-chemicals/cl-inventory-database

PUBCHEM

Open Chemistry Database

https://www.ncbi.nlm.nih.gov/pccompound

CAS No. UN No. Chemical Abstracts Service Registry Number United Nations Dangerous Goods Number

SUSMP

Standard for the Uniform Scheduling of Medicines and Poisons

SDS Code Used

This SDS has been prepared according to the SWA Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals May 2018.

This SDS summarises to the best of our knowledge the health and safety hazard information on the product and how to safely handle and use the product in the workplace, and should not be construed as guaranteeing specific technical properties. 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. Since methods and conditions are beyond our control, in inappropriate contexts we do not accept liability for any damages resulting from the use of, or reliance on, this information.

Reviewers Initials / Yr / Mth: JS1907

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