



Material Safety Data Sheet

SECTION 1: IDENTIFICATION OF THE CHEMICAL PRODUCT

Product Name: PUTRA-AMINE 625 SELECTIVE HERBICIDE

Product Type: Group I Herbicide/Aryloxyalkanoic acid

Product Use : For control of a broadleaf weeds in fallow before direct drilling or sowing of cereals and pastures and in cereal crops, pastures, sugar cane, peanuts and non-agricultural areas as per the Direction For Use Table.

SECTION 2: HAZARD IDENTIFICATION

Statement of Hazardous Nature

This product is classified as: Hazardous according to the criteria of ASCC Australia.
Not a Dangerous Good according to the Australian Dangerous Goods (ADG) Code.

Risk Phrases: R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

Safety Phrases: S13 Keep away from food, drink and animal feeding stuffs. S2 Keep out of reach of children.

SUSDP Classification: S6

ADG Classification: None allocated. **Not a Dangerous Good.**

UN Number: Not a marine pollutant

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS	Proportion
2,4D (present as dimethylamine and diethanolamine salt)	2008-39-1	63 %
Inert ingredients		to 100%

Exposure limits have not been established by ASCC for these ingredients ie. No TWA or STEL limits set. However an exposure standard has been set for 2,4-D acid at 10 mg/m3.

SECTION 4: FIRST AID MEASURES

Inhalation: If symptoms develop or persist, seek medical advice. Remove affected person to fresh air until recovered.

Skin Contact: If skin contact occurs, remove contaminated clothing and wash skin thoroughly with water. Remove contaminated clothing and launder before re-use.

Eye Contact: If in eyes, hold eyelids open and wash with copious amounts of water for at least 15 minutes. Seek medical advice if irritation develops or persists. Take care not to rinse contaminated water into the unaffected eye or onto the face.

Ingestion - swallowing: If poisoning occurs, contact a doctor or the **Poisons Information Centre (Australia) at 13 11 26**. Give a glass of water. If swallowed do NOT induce vomiting; seek medical advice immediately and show this container or label or contact the Poisons Information Centre on 13 11 26 (Aust). Make every effort to prevent vomit from entering the lungs. These instructions are suitable for ingestion of spray solution and small amounts of concentrate; however, if SUBSTANTIAL AMOUNTS of the concentrate have been swallowed (more than about 1 tablespoon) AND if medical assistance is more than 30 minutes away, the induction of vomiting should be CONSIDERED, preferably based on MEDICAL ADVICE if a physician can be contacted by phone. All care must be taken to prevent vomit from being inhaled. Do not give anything by mouth to a semi-conscious or unconscious person.

Advice to Doctor: Treatment is symptomatic.

SECTION 5: FIRE FIGHTING MEASURES

Fire and Explosion Hazards: There is no risk of an explosion from this product under normal circumstances if involved in a fire. May emit toxic fumes of hydrogen chloride or phosgene if involved in fires or exposed to extreme heat.

Extinguishing Media: Not Combustible. Use extinguishing media suited to burning materials ie. foam, dry powder, carbon dioxide or water spray.

Fire Fighting: When fighting fires involving significant quantities of this product, wear a splash suit complete with self contained breathing apparatus.

Flash point: Will not burn until water component is driven off.

Upper Flammability Limit: Does not burn. **Lower Flammability Limit:** Does not burn.

Autoignition temperature: Does not burn. **Flammability Class:** Does not burn.

SECTION 6: ACCIDENTAL RELEASE MEASURES

In the event of an accidental spill, control spill at source and prevent spillage from entering drains or water courses. Wear full protective clothing including face mask and face shield. All skin areas should be covered. Wear protective gloves of rubber, PVC. Absorb onto sand, vermiculite or other suitable absorbent material. If spill is large or if absorbent material is not available create a barrier to stop material spreading and going into drains or waterways.

Avoid using sawdust or other combustible material. Sweep up and pump recoverable product into labelled containers for salvage, and dispose of promptly at approved site.

After spill, wash area preventing runoff from entering drains or waterways. If significant quantity enters drains, advise emergency services and EPA.

SECTION 7: HANDLING AND STORAGE

Handle with care and keep exposure to this product to a minimum as practical. Ensure adequate ventilation whilst handling product. Do NOT spray in windy conditions. Do NOT contaminate dams, rivers or streams, or any other water bodies with pesticide or used containers.

Store in closed, original container in a well-ventilated shaded area. Keep container tightly closed when not in use. Keep container out of reach of children. **DO NOT** store for prolonged periods in direct sunlight.

Equipment that has been used for this chemical should not be used for the application of other materials to sensitive plants, unless it has been well washed out with hot soapy water or 1% solution of ammonia, followed by several fresh water rinses. Do not use on or in situations where damage to susceptible crops or plants such as cotton, tobacco, tomatoes, flowers, vines, fruit trees or other susceptible crop plants may result from direct application or drift. Refer label for further information.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure limits have not been established by ASCC for these ingredients ie. No TWA or STEL limits set. However an exposure standard has been set for 2,4-D acid at 10 mg/m³.

Ensure adequate ventilation and reduced dust in a shaded dry storage.

Personal Protective Equipment:

Australian Standards regarding safety clothing and equipment:

Respiratory equipment: **AS/NZS 1715**, Protective Gloves: **AS 2161**, Industrial Clothing: **AS2919**, Industrial Eye Protection: **AS1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS2210**

Eyes: Protective glasses or goggles should be worn when this product is being handled. Emergency eye wash facilities should be available where this product is being handled.

Skin: Prevent skin contact by wearing impervious gloves, clothes and, preferably overalls. Ensure all skin areas are covered.

Inhalation: Where product is being sprayed and a mist could be produced a respirator should be worn. It should be fitted with a type G cartridge, suitable for agricultural chemicals.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical Description & colour: Clear, red-brown liquid

Odour: Ammonical.

Boiling Point: > 100°C

Freezing/Melting Point: Approximately 0°C.

Volatiles: Water component.

Vapour Pressure: 16mm Hg (for water), 2,4-D amine salt is non volatile

Vapour Density: No data.

Specific Gravity: 1.26 @ 25°C

Water Solubility: soluble in water.

pH: approx 8.5

Volatility: 30%

Odour Threshold: No data.

Evaporation Rate: No data.

Coeff Oil/water distribution: No data

Autoignition temp: Does not burn

Product Name: **Putra-Amine 625 Selective Herbicide**

Issued: June 2011; **Version:** 3; **Revision:** June 2016

Poisons Information Centre: 13 1126 from anywhere in Australia

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability: Stable under normal temperatures and pressures

Reactivity: This product is unlikely to react or decompose under normal storage conditions.

Conditions to Avoid: Direct sunlight and lack of ventilation

Incompatibilities: Strong oxidizing agents. Reaction of the concentrate or spray mix with acids will precipitate solid 2,4-D acid and largely de-activate the product and cause blockages in spray equipment. The addition of a strong alkali such as caustic soda will cause release of dimethylamine vapour. Dimethylamine is moderately toxic, LD50 (oral, rat) is 700 mg/kg and a TLV of 10 ppm (TWA) has been set.

Hazardous Polymerization: Hazardous polymerisation is not possible.

SECTION 11: TOXICOLOGICAL INFORMATION

Inhalation The components of the product are of low volatility and no adverse effects are expected from handling the concentrate. The concentrate is considered harmful by inhalation by Safe Work Australia. A moderate hazard exists from inhalation of spray and care should be taken to avoid inhalation of spray mists.

Ingestion Not a likely route of exposure. Amounts swallowed incidental to normal handling procedures and use are not expected to cause injury. However, swallowing of large amounts may cause injury. Ingestion of the product in relatively large amounts can result in headache, nausea, lethargy, motor weakness and un-coordination.

Skin Prolonged contact with the concentrate may cause irritation. Prolonged contact of the concentrate with skin will result in absorption of some 2,4-D which can be harmful.

Eye The concentrate will cause irritation of the eyes. Prolonged contact with the concentrate may cause damage to the eye.

Chronic Effects Chronic Overexposure: Repeated absorption of relatively large amounts of 2,4-D presents a risk to the liver and kidneys.

Carcinogenicity: The weight of the evidence is that 2,4-D is not carcinogenic.

Acute Toxicity – Oral: LD50 (rat) 699 mg/kg for 2,4-dichlorophenoxyacetic acid

LD50 (rat) 700 mg/kg for dimethylamine

LD50 (rat) 710 mg/kg for diethanolamine

Acute Toxicity – Dermal: LD50 (rabbit) >2000 mg/kg

Acute Toxicity – Inhalation: LC50 (rat) (4hr) >1.79 mg/l

Skin Irritation: Not a skin irritant.

Skin Sensitisation: Product is not a skin sensitiser.

Other Information The Australian Acceptable Daily Intake (ADI) for 2,4-D 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 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, September 2006). In trials using 2,4-D as a drug, studies on volunteers have shown that doses of between 5 and 36 mg/kg body weight do not cause any acute toxic effects. Formulated 2,4-D products can be absorbed by ingestion, inhalation (spray mist) and through the skin. Studies of users (sprayers) have shown that absorption through the skin is the most common route. When used with good agricultural spraying practice and good personal hygiene, absorption of 2,4-D is very low.

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SECTION 12: ECOLOGICAL INFORMATION Known Harmful Effects on the Environment

Persistence / Degradability Half life in soil is typically 7 days. Loss from soil is principally by microbial degradation.

Mobility Rapid degradation in soil prevents significant downward movement under normal conditions.

Known Harmful Effects on the Environment

2,4-D amine products do not appear to pose any threat to birds.

2,4-D amine products do not appear to pose any threat to fish or other aquatic organisms other than in very high concentrations.

Environ. Protection Spray drift can cause damage, read the label for more information.

Acute Toxicity - Fish Not toxic to fish. LC50 (96 hr) for rainbow trout is ~100 mg/l.

Acute Toxicity – Daphnia LC50 (48hr) for 2,4-D amines is 184 mg/l.

Acute Toxicity - Other Organisms

Birds: Not toxic to birds. LD50 for mallard ducks is >1000 mg/kg

Bees: Not toxic to bees. LD50 104.5 µg/bee.

Sewage Treatment Not inhibitory in sewage system, 2,4-D is rapidly biodegraded.

SECTION 13: DISPOSAL CONSIDERATIONS

Instructions for the disposal of this product and its containers are listed on the product label.

For collection of unwanted rural chemicals, contact ChemClear ®1800 008 182 www.chemclear.com.au and for help with the disposal of empty drums, contact DrumMuster® www.drummuster.com.au for local and State contacts.

SECTION 14: TRANSPORT INFORMATION

UN Number: None allocated

Proper Shipping Name: None allocated

SUSDP Classification: S6

ADG Class: None allocated. Not a dangerous good.

Hazchem Code: None allocated

Packaging Group: None allocated

SECTION 15: REGULATORY INFORMATION

SUSDP: Schedule 6; POISON KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING

AICS (Australia): All of the components in this product are listed on the Australian Inventory of Chemical Substances.

APVMA Registration Number: 63813

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SECTION 16: OTHER INFORMATION

This MSDS contains only safety-related information sourced from the public domain and analytical results on this product:

Acronyms:

ADG Code Australian Code for the Transport of Dangerous Goods by Road and Rail, 7th Edition

AICS Australian Inventory of Chemical Substances

CAS number Chemical Abstracts Service Registry Number

Hazchem Number Emergency action code of numbers and letters that provide information firefighters

IARC International Agency for Research on Cancer

ASCC Office of the Australian Safety and Compensation Council

NTP National Toxicology Program (USA)

R-Phrase Risk Phrase

SUSDP Standard for the Uniform Scheduling of Drugs & Poisons

UN Number United Nations Number

Police and Fire Brigade: Dial 000 **Poisons Information Centre (13 1126)**

Emergency contact: 04 0214 9346 (24 hours)

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