

Recycled Water Information Sheet

Product identifier & identity for the chemical

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| Product identifier | Recycled water | |
| Other means of identification | Also known as, depending upon class: dual reticulation, reclaimed water, sewage effluent, treated wastewater | |
| Recommended use of the chemical and restrictions on use | <p>Recommended uses:</p> <ul style="list-style-type: none"> • any purpose outlined in Appendix A where the class of recycled water supplied by Queensland Urban Utilities exceeds the lowest acceptable recycled water class. <p>Not recommended uses:</p> <ul style="list-style-type: none"> • not for human consumption or bathing; • not to fill swimming pools; • not for any purpose unless consistent with the uses listed in Appendix A; • not to be used unless minimum risk control measures detailed in Appendix B are implemented. | |
| Details of manufacturer | Supplier name | Queensland Urban Utilities |
| | ABN | 86 673 835 011 |
| | Address | GPO Box 2765 Brisbane QLD 4001 |
| Emergency phone number | Faults & Emergencies | 13 23 64 |

Hazard identification

The mists and aerosols (spray) from this product are classified as non-hazardous according to the criteria of Safe Work Australia.

This product is not a dangerous good according to the Australian Dangerous Goods Code.

Classification Signal word

Hazard category 4 Acute toxicity – oral
Warning



Hazard statement(s)

H302 **Harmful if swallowed**

Precautionary statement(s)

P264 **Wash hands thoroughly after handling.**
 P270 **Do not eat, drink or smoke when using this product.**
 P301 + P312 **IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.**
 P330 **Rinse mouth.**

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Composition and information on ingredients

The recycled Water supplied by Queensland Urban Utilities has been tested and the quality has proven to meet or exceed the quality standards outlined in the *Public Health Regulation 2005* for the advertised class of recycled water supplied by each scheme.

First aid measures

First aid measures

- Wash skin with drinking water.
- Flush eye immediately with drinking water.
- Do not induce vomiting. Immediately rinse mouth with drinking water.

Symptoms caused by exposure

- Abdominal pain
- Diarrhea

Medical attention and special treatment

Treat symptomatically.

Fire fighting measures

Not a flammable chemical.

Suitable extinguishing equipment

None required.

Specific hazards arising from the chemical

None

Special protective equipment and precautions for fire fighters

None

Accidental release measures

Personal precautions, protective equipment and emergency procedures

- Avoid contact
- Wear eye and hand protection

Environmental precautions

Avoid releases to waters and waterways.

Methods and materials for containment and cleaning up

Contain release with a physical barrier (example: sand bags, straw bales, earthen bund).

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Handling and storage

Precautions for safe handling

- Avoid prolonged contact with skin, eyes and clothing
- Avoid splashing
- Never siphon by mouth

Conditions for safe storage

- Storages must be labelled or signed appropriately, as per Appendix B - Signs, pipes and fittings.
- Where recycled water is stored, the customer becomes responsible for maintaining the quality of the recycled water as received. A free chlorine residual between 0.3 – 0.7mg/L is recommended to prevent microbial regrowth.
- Storages for recycled water must not be allowed to overflow to the environment.
- Where storage occurs in open dams or where disinfection is not maintained, the quality of the recycled water may deteriorate. Risk control measures must take this deterioration of quality into account.

Exposure controls and personal protection

Safe Work Australia has not assigned a national occupational exposure limit to this specific product.

Microbiological monitoring

- Queensland Urban Utilities monitors the microbiological quality of the recycled water produced before being supplied to customers. A summary of this quality is available on the Queensland Urban Utilities' website.

Engineering controls

- Ensure information signage is installed at the property boundary stating that recycled water is used on site.
- Reduce aerosols by using large droplet sprinklers or drip irrigation.
- Ensure taps and fittings supplied with recycled water have removable or lockable handles to prevent accidental use.
- Use 180° sprinkler heads at property boundaries.

Personal protective equipment

- Do not inhale spray or mists.
- Wash hands with drinking water after use.
- Avoid splashing into eyes or face.

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Physical and chemical properties

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| Colour | Clear |
| Physical state | Liquid |
| Odour | None |
| pH | 6.5 – 8.5 |
| Freezing point | 0°C |
| Boiling point | 100°C |

Stability and reactivity

| | |
|-------------------|--------------|
| Reactivity | Not reactive |
| Stability | Stable |

Toxicological information

Toxicological data has not been determined specifically for this product.

Ecological information

Ecological data has been determined specifically for this product. Information provided is based on knowledge of the components and the ecotoxicology of similar products.

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| Ecotoxicity | This product is not expected to have any ecotoxicological effects. |
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Disposal considerations

Preferential irrigation to land.

Disposal to sewer network will require a Trade Waste approval with Queensland Urban Utilities.
Not to be disposed to natural waterways.

Transport information

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| Environmental hazards for transport purposes | Recycled water is considered to be a prescribed water contaminant (<i>Environmental Protection Regulation 2008</i>). Spills to natural waterways during transportation are to be avoided. |
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| Hazchem or emergency action code | This product is not classified as a dangerous good in accordance with the Australian Dangerous Goods (ADG) Code for transport by road or rail. |
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Regulatory information

The quality of the product is dictated by limits specified in the *Public Health Regulation 2005*.

Under the *Workplace Health & Safety Act 1995*, Queensland Urban Utilities is responsible for ensuring that the product is safe and without risk when used properly. The product must be tested and information on its proper use be provided to any customers. Any persons using, handling, storing or transporting the product have an obligation to do so safely.

Other information

Acronyms

| | |
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| ADG | Australian Dangerous Goods |
| ADWG | Australian Drinking Water Guidelines |

Document revision

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| Revision 1 | 27 January 2015 |
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Changes since last revision

Information sheet updated to reflect Code of Practice for the preparation of safety data sheets for hazardous chemicals 2011.

Further information

The information contained in this recycled water information sheet, as of the issue date, is believed to be true and correct. However, the accuracy or completeness of this information and any recommendations or suggestions are made without warranty or guarantee. Since the conditions of use are beyond the control of Queensland Urban Utilities, it is the responsibility of the user to determine the conditions of safe use of this product. Please consult the relevant legislation, regulations and guidelines governing the use and storage of this type of product.

For specific information on recycled water, please see the recycled water pages on the Queensland Urban Utilities website www.urbanutilities.com

Recycled Water Information Sheet

Appendix A - Recycled water uses and quality requirements

| RECYCLED WATER USE | CLASS |
|---|-----------|
| Domestic and commercial property use | |
| • toilet flushing, outdoor hosing and wash down, above ground garden watering | A+ |
| Irrigating public open space and golf courses | |
| • above ground open space irrigation, uncontrolled access | A |
| • controlled access or subsurface irrigation | C |
| Irrigating food crops and nurseries | |
| • food crops consumed raw or minimally processed | A+ |
| • sugar cane and grapes for wine production | C |
| • other above ground food crops with above ground irrigation | A+ |
| • other above ground food crops with below ground irrigation | C |
| • root crops | A+ |
| • nurseries irrigating ready to eat crops | A+ |
| Irrigating pasture/fodder and agricultural wash down | |
| • pasture/fodder for dairy animals without withholding period | B |
| • pasture/fodder for dairy animals with withholding period of five days | C |
| • pasture/fodder for other grazing animals except pigs with withholding period of four hours | C |
| • wash down of hard surfaces in agricultural industries | B |
| Irrigating non-food crops | |
| • nurseries not irrigating ready to eat products | A |
| • silviculture, turf, cotton with controlled access and other safeguards to protect the health of workers or neighbours | D |
| Industrial purposes | |
| • open system (potential for high human contact) e.g. car wash or quarry where aerosol generation is constant | A+ |
| • open system (potential for occasional human contact, but with safeguards in place) | A |
| • closed system (low human contact) | C |
| • irrigation of "no public access" areas for dust suppression or soil compaction | C |
| • fire fighting | A+ |
| Recreational purposes | |
| • fountains and water features (no primary or secondary contact recreation) | A |
| • water features for amenity purposes only (controlled access) | C |
| • natural or artificial wetlands | C |

- Irrigation or spraying recycled water requires full implementation of the irrigation risk control measures in Appendix B.
- Table sourced from the Queensland Water Recycling Guidelines of December 2005.
- The term "Nurseries" is inclusive of all businesses where plants are grown to supply products either on farm, retail or wholesale. Products may include the plant itself or parts thereof such as flowers, leaves, fruit, berries or roots.

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Appendix B - Control measures for spraying of recycled water for irrigation and other purposes.

| USE | WATER QUALITY | CONTROL MEASURES TO RESTRICT HUMAN EXPOSURE |
|--|---------------|--|
| <p>Highly processed food crops (e.g. wheat, sugar cane, tea, etc.)</p> <p>Open space irrigation (e.g. golf courses, sports fields, parks)</p> <p>Nurseries (excluding herbs, cut flowers and fruiting trees)</p> <p>Non-food crops (e.g. turf, cotton, silviculture, forestry)</p> | Class A+ | <ul style="list-style-type: none"> No proposed Control measures |
| | Class A | <ul style="list-style-type: none"> There must be no recycled water overspray of the property boundary, pedestrian paths or walkways. |
| | Class B | <ul style="list-style-type: none"> Use drip or subsurface irrigation; OR Restrict public access during and after irrigation for four (4) hours or until dry; AND One (1) of the following: <ul style="list-style-type: none"> Implement spray drift controls to prevent drift beyond the irrigation area. Implement a minimum buffer distance of 30 metres from the irrigation area to the nearest point of public access. |
| | Class C | <ul style="list-style-type: none"> Use drip or subsurface irrigation; OR Restrict public access during and after irrigation for four (4) hours or until dry; AND Both of the following: <ul style="list-style-type: none"> Implement spray drift controls to prevent drift beyond the irrigation area. Implement a minimum buffer distance of 50 metres from the irrigation area to the nearest point of public access. For highly processed food crops, produce must not be wet with recycled water when harvested. |
| <p>Non-food crops for animal grazing with human food chain exposure (e.g. pasture, fodder, chaff)</p> | Class A+ | <ul style="list-style-type: none"> No proposed Control measures |
| | Class A | <ul style="list-style-type: none"> Pigs must be excluded from exposure to the non-food crops. For dairy animals there must be: <ul style="list-style-type: none"> A withholding period of four (4) hours; OR Drying or storing of non-food crops before use. |
| | Class B | <ul style="list-style-type: none"> Use drip or subsurface irrigation; OR Restrict public access during and after irrigation for four (4) hours or until dry; AND One (1) of the following: <ul style="list-style-type: none"> Implement spray drift controls to prevent drift beyond the irrigation area. Implement a minimum buffer distance of 30 metres from the irrigation area to the nearest point of public access. |
| | Class C | <ul style="list-style-type: none"> Pigs must be excluded from exposure to the non-food crops. For dairy animals there must be: <ul style="list-style-type: none"> A withholding period of five (5) days; OR Drying or storing of non-food crops before use For all other grazing animals there must be: <ul style="list-style-type: none"> A withholding period of four (4) hours; OR Drying or storing of non-food crops before use. Use drip or subsurface irrigation; OR Restrict public access during and after irrigation for four (4) hours or until dry; AND Both of the following: <ul style="list-style-type: none"> Implement spray drift controls to prevent drift beyond the irrigation area. Implement a minimum buffer distance of 50 metres from the irrigation area to the nearest point of public access. |

| USE | WATER QUALITY | CONTROL MEASURES TO RESTRICT HUMAN EXPOSURE |
|---|---|---|
| Non-food crops for animal grazing without human food chain exposure (e.g. pasture, fodder, chaff) | Class A+ | <ul style="list-style-type: none"> No proposed Control measures |
| | Class A | <ul style="list-style-type: none"> Use drip or subsurface irrigation; OR Restrict public access during and after irrigation for four (4) hours or until dry; AND One of the following: <ul style="list-style-type: none"> Implement spray drift controls to prevent drift beyond the irrigation area. Implement a minimum buffer distance of 30 metres from the irrigation area to the nearest point of public access. |
| | Class B | <ul style="list-style-type: none"> Use drip or subsurface irrigation; OR Restrict public access during and after irrigation for four (4) hours or until dry; AND Both of the following: <ul style="list-style-type: none"> Implement spray drift controls to prevent drift beyond the irrigation area. Implement a minimum buffer distance of 50 metres from the irrigation area to the nearest point of public access. |
| | Class C | <ul style="list-style-type: none"> Use drip or subsurface irrigation; OR Restrict public access during and after irrigation for four (4) hours or until dry; AND Both of the following: <ul style="list-style-type: none"> Implement spray drift controls to prevent drift beyond the irrigation area. Implement a minimum buffer distance of 50 metres from the irrigation area to the nearest point of public access. |
| Non-food crops only (e.g. turf, cotton, silviculture, forestry) | Class D | <ul style="list-style-type: none"> Use drip or subsurface irrigation Restrict public access during and after irrigation for four (4) hours or until dry. Implement a minimum buffer distance of 20 metres from the irrigation area to any road or dwelling. |
| Industrial uses (e.g. coal washing, process water, boiler and cooling tower feed water) Road works or dust suppression | Class A+ | <ul style="list-style-type: none"> No proposed Control measures |
| | Class A | <ul style="list-style-type: none"> There must be no recycled water overspray of the property boundary, pedestrian paths or walkways, either direct spray or spray drift. |
| | Class B | <ul style="list-style-type: none"> Restrict public access during and after application for four (4) hours or until dry. Implement spray drift controls to prevent drift beyond the application area. Implement a minimum buffer distance of 30 metres from the application area to the nearest point of public access. |
| Class C | <ul style="list-style-type: none"> Restrict public access during and after application for four (4) hours or until dry. Implement spray drift controls to prevent drift beyond the application area. Implement a minimum buffer distance of 50 metres from the application area to the nearest point of public access. | |
| Protection of Drinking water supplies | All Classes | <ul style="list-style-type: none"> The recycled water system must not be connected to a potable water supply The recycled water must not contaminate any potable water supply, for example, bore, dam, rainwater tank, or other storage likely to be used to supply water for human consumption. There must be no surface water runoff from the application area, or ponding of recycled water. |
| Signs, pipes and fittings | All Classes | <ul style="list-style-type: none"> Prominent warning signs must be displayed that indicate the water is not suitable for drinking or human contact, for example: <ul style="list-style-type: none"> Recycled water: do not drink, avoid contact Recycled water: do not enter when irrigation in progress Recycled water storage: no swimming, wading or boating Section 9 of AS/NZS 3500.1:20034, Plumbing and drainage - Water services, must be complied with in relation to identification and security of recycled water infrastructure, and cross connection prevention. |

- Public access means any point either a member of the public or neighboring land owner may access.
- The Buffer Distances start from the furthest extent of spray drift and cannot extend beyond the boundary of the lot/s where recycled water use has been approved.
- The control measures described within this table for each water quality are the minimum required. To further reduce risk a scheme could utilise the more stringent controls suitable for a lower class of water by choice. A scheme using Class A recycled water may choose to use Class C control measures, this cannot be reversed.
- (Note: Helminth controls and monitoring to be discussed where livestock are exposed to recycled water)

FOR MORE INFORMATION VISIT
www.urbanutilities.com.au

GENERAL ENQUIRIES
 13 26 57 (7am-7pm weekdays)

FAULTS AND EMERGENCIES
 13 23 64 (24/7)