

Mosquito Control in Rainwater Tanks

Preventing Mosquito Breeding

Mosquitoes and other nuisance insects need to be excluded from rainwater tanks. Water ponding in gutters also needs to be prevented as it can provide breeding sites for mosquitoes and could lead to eggs being washed into tanks.

Unless in use, all access points, excluding the inlet and any overflows, should be kept shut with close fitting lids that will prevent mosquito access. Inlets and overflows should be covered with closely fitting removable insect-proof screens.

Mosquito Control

By far the preferred approach for managing mosquitoes and other insects is to keep them out of tanks. In addition, rainwater should not be allowed to pool in containers or on surfaces below tank outlets or taps, as this can also provide a breeding site.

Detection of mosquito larvae (wigglers) in rainwater tanks indicates the presence of an opening through which female mosquitoes can enter and lay eggs or the entry of eggs laid in ponded water collected in roof gutters.

Gaps can occur:

- in mesh used to protect inlets and overflows
- around inspection and access points
- between the roof and main body of the tank
- in the tank itself due to corrosion or physical damage

If mosquitoes or other insects are found in rainwater tanks, the point of entry should be located and repaired. As well as preventing further access, this will prevent the escape of emerging adults. Gutters should be inspected to ensure they do not contain ponded water and cleaned if necessary.

There is no ideal treatment to kill mosquito larvae present in rainwater. The two commonly recognised treatments involve adding chemicals (medicinal or liquid paraffin or kerosene) to tanks, which defeats one of the advantages of collecting rainwater. In addition, problems have been reported with both types of treatment.

As a last resort, tanks can be treated by adding a small quantity of medicinal or liquid paraffin or domestic kerosene. The recommended dose of kerosene is 5mL or one teaspoon for a 1kL tank up to 15mL or 3 teaspoons for a 10kL tank. When using paraffin the dose is double that used for kerosene.



Note: Commercial or industrial kerosene, for example, power kerosene for tractors etc. should not be use in rainwater tanks.

Paraffin can be used in all types of tanks, but there have been reports of coagulation after a time and of deposits forming on the sides of tanks.

Kerosene is not suitable for use in tanks coated with Aquaplate® and may not be suitable for use in tanks constructed of, or lined with, plastic. If in doubt, consult the manufacturer of the tank. Used carefully, kerosene will not result in risks to human health, but excess quantities can taint the water and very high doses can be poisonous to humans. Kerosene added to the surface will not mix through the body of rainwater in the tank and it will either evaporate or be washed out of the tank by overflow. Kerosene should not be added to tanks when water levels are low.

If excess quantities of kerosene are added to the point that taste is affected, the only solution is to drain and clean the tank.

**extract from Dept Health & Ageing 'Guideline on use of rainwater tanks'*