

Leaders in Polyethylene Tanks

Call **1800 758 709** www.nationalpolyindustries.com.au

Choosing a Safe Water Tank for Drinkable Rainwater

Rainwater is one the highest quality sources for drinking water if collected and stored properly. So the type of material used to manufacture your water storage tank makes a big difference to the water quality you will experience.

Water Tank Materials

Water tanks can be constructed from a wide range of materials including polyethylene (plastic), steel (galvanised or stainless), Aquaplate®, Zincalume®, fibreglass and concrete. Rainwater tanks manufactured in Australia today are normally suitable for storing potable rainwater – that is, water safe for drinking and cooking purposes.



Steel Tanks are often galvanised or specially constructed to withstand rust and corrosion for many years. Yet, they may leave your rainwater with an unpleasant metallic taste of zinc. Although the water is often still safe to drink, many find this taste unpleasant.

Due to this, and for greater protection against corrosion, many steel tanks often come with poly linings that must be carefully installed so as to not rip or tear. Rainwater which is quite acidic then never touches the steel container, but only the poly lining fabric.

Poly Tanks – a simpler, strong and cost-effective alternative for your rainwater tank are those made entirely from UV-protected and food-grade polyethylene. Going for a ribbed design, one-piece construction (no side seams) with thicker walls at the bottom (where the water pressure is) is a great option.

Poly tanks and the poly linings used in steel tanks should be constructed from materials that comply with the Australian Standard **AS/NZS 2070** – 'Plastics materials for food contact use'. Additionally, go for poly water tanks that have been tested *after construction* to comply with the requirements of **AS/NZS 4020** – 'Testing of products for use in contact with drinking water'.

Tank Considerations

Other tank considerations to be aware to that can influence your rainwater drinking quality include:

- Tank fittings and connecting pipes should be lead free and considered safe for drinking purposes (read more in <u>Plumbing in Your Rainwater Tank for Safe Drinking Water</u>).
- Tank longevity before it starts break down and taint the water (for example, if steel tanks rust and corrode then this will deposit heavy metal elements into your rainwater).
- Tank material influencing the taste of your water (for example, steels tanks often provide metallic tasting water).
- Sunlight is blocked from penetrating the tank and hitting the water which promotes algae growth (you want a tank that blocks the light entirely).
- Access points have tight seals and proper screening to prevent pests getting in.
- Filters and accessories that help maintain water quality.

Need more information?

For more information you may want to look at these following articles:

- Collecting Safe and Drinkable Rainwater from Your Rooftop
- Proper Water Tank Maintenance for Drinkable Rainwater
- Plumbing in Your Rainwater Tank for Safe Drinking Water

If you have found this article helpful and are looking for a water tank, talk to our friendly staff today to discuss your needs and get a FREE quote:

Phone: 1800 758 709 **Website:** www.nationalpolyindustries.com.au

Web version (current):

www.nationalpolyindustries.com.au/knowledge-base/choosing-a-safe-water-tank-for-drinkable-rainwater/

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National Poly Industries is a privately owned Australian company manufacturing tanks for over 20 years and polyethylene tanks for over 15 years.

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