

Premium lead-free drinking water systems

FLEXIBLE PLUMBING PIPE SYSTEMS
FOR WATER SUPPLY AND HEATING INSTALLATIONS

PIPELIFE 



Striving for safer drinking water

The World Health Organization (WHO) recognizes lead in drinking water as a major public health concern and strongly supports efforts to reduce lead exposure, given its developmental impacts on children and pregnant women.

In 1993, the WHO introduced international guidelines suggesting lead in drinking water should not exceed 10 µg/l. However, international regulatory bodies are taking these restrictions a step further as efforts to improve drinking water quality ramp up.



The EU drinking water directive

In 2021, the European Commission updated the EU Drinking Water Directive to further limit the amount of lead in drinking water. The updated Directive reduces the maximum lead limit from 10 µg/l to 5 µg/l. Accordingly, lead-leaching alloys in water distribution lines and fittings are being scrutinized, and there is growing interest in the availability and viability of lead-free alternatives.

Directive (EU) 2020/2184 of the European Parliament and of the Council on the quality of water intended for human consumption on the quality of water intended for human consumption

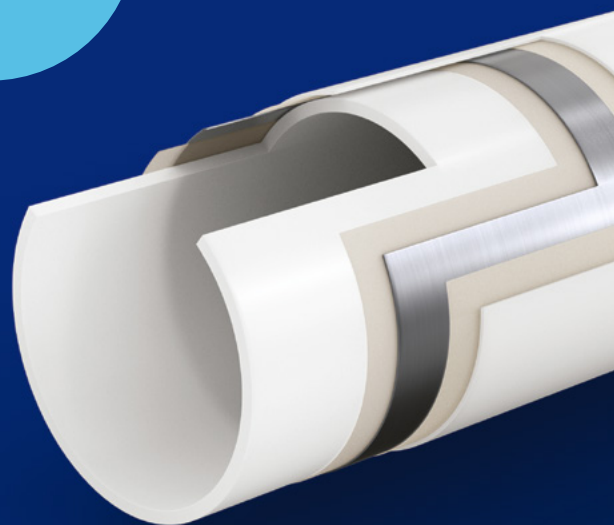


Although the EU has been ambitious by halving the previous lead limit, further reductions are likely to come in future, given internationally recognized concerns about lead consumption. While the amount of lead allowed in drinking water products has been significantly reduced, not all approved materials are technically lead-free. However, given the trend towards tighter lead restrictions, we have developed our water distribution portfolio with materials that are considered lead-free under the EU definition.

Defining “lead-free”

While international “lead-free” definitions differ, we have developed our portfolio in accordance with the **EU definition**: Products must not consist of more than 0.1% lead. While most commonly used alloys no longer comply with the updated Directive, there are still some viable alloys that do not meet the above lead-free definition.

Lead-free



Economize with versatile product combinations

While transitioning to lead-free systems can incur additional expenses, we've diversified our range to ensure you have options to keep costs in check while remaining compliant with the incoming requirements.

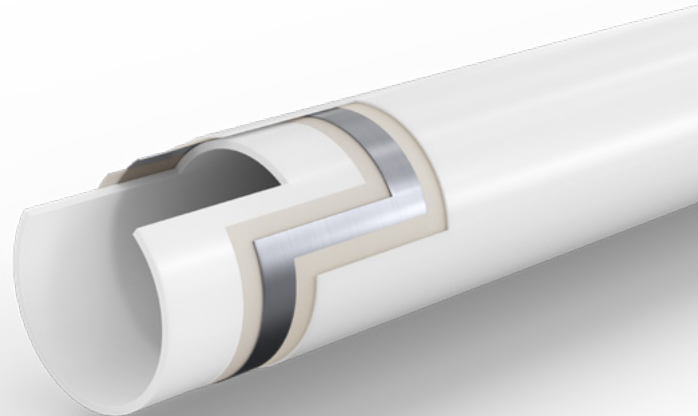


Pipes

Our multilayer plumbing pipes combine the attributes of high-quality PE-RT II and aluminum.

An internal aluminum layer provides thermal and pressure resistance, form stability and oxygen impermeability. This layer is encased by internal and external PE-RT II layers to ensure pipes remain flexible, corrosion-resistant, and, most importantly, lead-free.

Easily bent to desired angles, our lead-free pipes minimize installation times, avoid unnecessary fittings and remain highly compatible with a variety of setups. They also provide resilience against changes in temperature, pressure stroke loading, torsion and tension while ensuring a safe, lead-free water supply.



Fittings

Silicone brass

Our lead-free brass fittings are made from premium silicone brass. Not only do they significantly reduce lead in drinking water, but their high copper content provides superior corrosion resistance compared to other widely used alloys on the market. Silicone brass boasts a proven track record after years of successful market integration, and its global availability guarantees consistent supply chains.



PPSU

We have also extended our range of PPSU fittings to provide an excellent plastic alternative that can supplement your setup and keep costs down. PPSU is a 100% lead-free thermoplastic with high thermal, pressure and corrosion resistance — ensuring system longevity and drinking water safety.



Benefit from premium lead-free plumbing



Supply safer drinking water

Installing a lead-free plumbing system improves the quality of your building's drinking water and protects the health of those who consume it.



Comply with tightening regulations

Securing lead-free drinking water in your building will help you and your clients remain compliant with legislation at both European and national levels. The carefully selected material composition of our lead-free pipes and fittings ensures your water supply stays within the EU's lead target of less than 5 µg/l.



Enjoy superior corrosion resistance

PIPELIFE premium lead-free products are highly resistant to dezincification and stress corrosion. Our silicone brass fittings have a higher copper and silicone content than the majority of common brass alloys, and our PPSU plastic alternatives are completely invulnerable to corrosion from drinking water contact.



Mix and match

All products in our lead-free range are highly compatible, enabling bespoke setups that meet your specific project requirements. Our PPSU options have been designed to work harmoniously with brass fittings in your setup, offering cost-effective alternatives during the lead-free transition.



Save time with easy installation

Our flexible pipes can be hand-bent to streamline and reduce connections. Highly compatible fittings align with widely used TH and U profile press jaws, avoiding the need for specialized tools or equipment.



Experience long-term reliability

With premium lead-free components that boast a service life of more than 50 years, you can future-proof your property against ever-tightening regulations and ensure buildings benefit from pristine plumbing systems for years to come.



Leverage our full design service

Based on the information you provide, PIPELIFE engineers can develop detailed plans for optimizing your system setup. The service includes pipe dimensioning, pressure loss calculations, material specifications, and hydraulic checks. We also offer a comprehensive BIM library if you prefer to design setups yourself.



Rest assured with proven quality

PE-RT II, PPSU and silicone brass are tried-and-tested materials that have been used in several industries for many years — favored for their corrosion resistance, hydrolytic stability and overall longevity.



Create sustainable value

Efforts to create a lead-free drinking water supply are born out of an ambition to support healthier, more sustainable lives. We strive to provide solutions that not only stand the test of time but also prioritize the health and environment of those who use them.

Eco-friendly practices

We have made huge strides in the energy efficiency of our processes by reusing production off-heat, installing photovoltaic systems in factories and utilizing closed cooling circuits. Beyond this, all PIPELIFE products are now recyclable or reusable.

Circular economy

Self-imposed sustainability goals ensure that, as of 2023, all new PIPELIFE products are 100% recyclable or reusable. We also place a significant emphasis on the uptake of recycled and fossil-free plastic in production while maintaining the same high quality our clients expect.

Enduring quality

PIPELIFE plumbing systems are expertly produced from the highest quality materials to ensure robust longevity. All our lead-free pipes and fittings have a lifespan of at least 50 years, reducing the need for unnecessary replacements. This longevity translates to less waste and fewer resources consumed over time.



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