

## A green, water-saving extinguishing agent PPO® ForExt for preventing, extinguishing and controlling wildfires

We have developed an effective, environmentally friendly, fluorine-free forest fire extinguishing agent that saves water and works with all fire equipment. We have also designed ForExt to prevent fire from spreading during hot work and all fire handling in general.



Our partner, [Kiilto Oy](#), manufactures this unique chemical for us. Kiilto is a long-term professional in chemical industry solutions committed to compacting climate change.

### The global need for multi-purpose and non-toxic extinguishing agent

Climate change is a real global threat as the climate warms. Wildfires are strongly connected to climate change, increasingly threatening the existence of forest ecosystems.

We need global solid multidisciplinary cooperation and practical tools to prevent, extinguish and control wildfires. Fortunately, as technology develops, it offers new innovative means, such as satellites, drones and robots, to detect and prevent wildfires. Also, public fire-safety education and law enforcement support positive development.

However, the tools have lacked an effective but non-toxic and water-saving forest fire extinguishing agent that can prevent, extinguish and control fires without harming the soil, water bodies and living organisms.

That's why we set out to develop the unique **PPO® FOREXT**, providing an environmentally friendly, sustainable, scalable and affordable way to fight forest fires.

### PPO® ForExt stops the fire and prevents it from spreading

PPO® ForExt (patent pending) stops the fire and prevents it from spreading. The substance is mixed with water at a mixing ratio 1:100 and first applied to the outer edges of the forest fire.

The treated zone prevents the fire from spreading further on the ground's surface and inside. After this, ForExt can be used for the actual extinguishing.

ForExt was tested in real action during the post-extinguishing of the Kalajoki forest fire in 2021, where it proved its functionality – the treated areas did not ignite again.

The ForExt/water mixture can be spread with any existing firefighting equipment. Mixed with water, it has the same velocity as water, so it will not damage or block even the tiniest fire nozzles.

PPO® ForExt is easy to spread and brings help to the fire area quickly. This unique chemical does not cause damage to people, nature, aquatic ecosystems, animals or firefighting equipment.

## Videos

The video shows how PPO® ForExt works in practice and can be used for different purposes: [PPO® FOrExt info video, 2:26 sec.](#)

[Short video presentation, 0:41 sec.](#)

### More info:

Mr Timo Ohtonen, Managing Director, [timo.ohtonen@ppo-elektroniikka.fi](mailto:timo.ohtonen@ppo-elektroniikka.fi)

Mr Tuomas Tiirinki, Export Director, [tuomas.tiirinki@ppo-elektroniikka.fi](mailto:tuomas.tiirinki@ppo-elektroniikka.fi)

Tel. +358 9 566 0920

PPO-Elektroniikka Oy, Kaarelantie 21, 00430 Helsinki, Finland

[ppo@ppo-elektroniikka.fi](mailto:ppo@ppo-elektroniikka.fi)

[www.ppo-elektroniikka.fi](http://www.ppo-elektroniikka.fi), [www.ppofoext.com](http://www.ppofoext.com)

## Kiilto Oy and PPO-Elektroniikka – strong Finnish family businesses

**PPO-Elektroniikka Oy** specialises in safety technology. The company has produced tailored solutions to improve safety and prevent damage since 1981.



**Kiilto Oy** is a growing Finnish family-owned company with a hundred-year history. The company develops, manufactures and markets chemical industry solutions in four business areas: construction, industrial bonding, professional hygiene and consumer goods. Kiilto produces environmentally friendly fire retardants, for example, for the wood and paper and packaging industries.



**Picture 1.** ForExt was applied during the after-extinguishing of the Kalajoki forest fire from special equipment designed for forest fires. This type of equipment reaches the most challenging terrain that fire trucks cannot get.



**Picture 2.** In the summer of 2021, the spreadability of the ForExt/water mixture was tested in Mikkeli with different fire equipment and nozzles. The mix worked excellently, even with the smallest nozzles.

