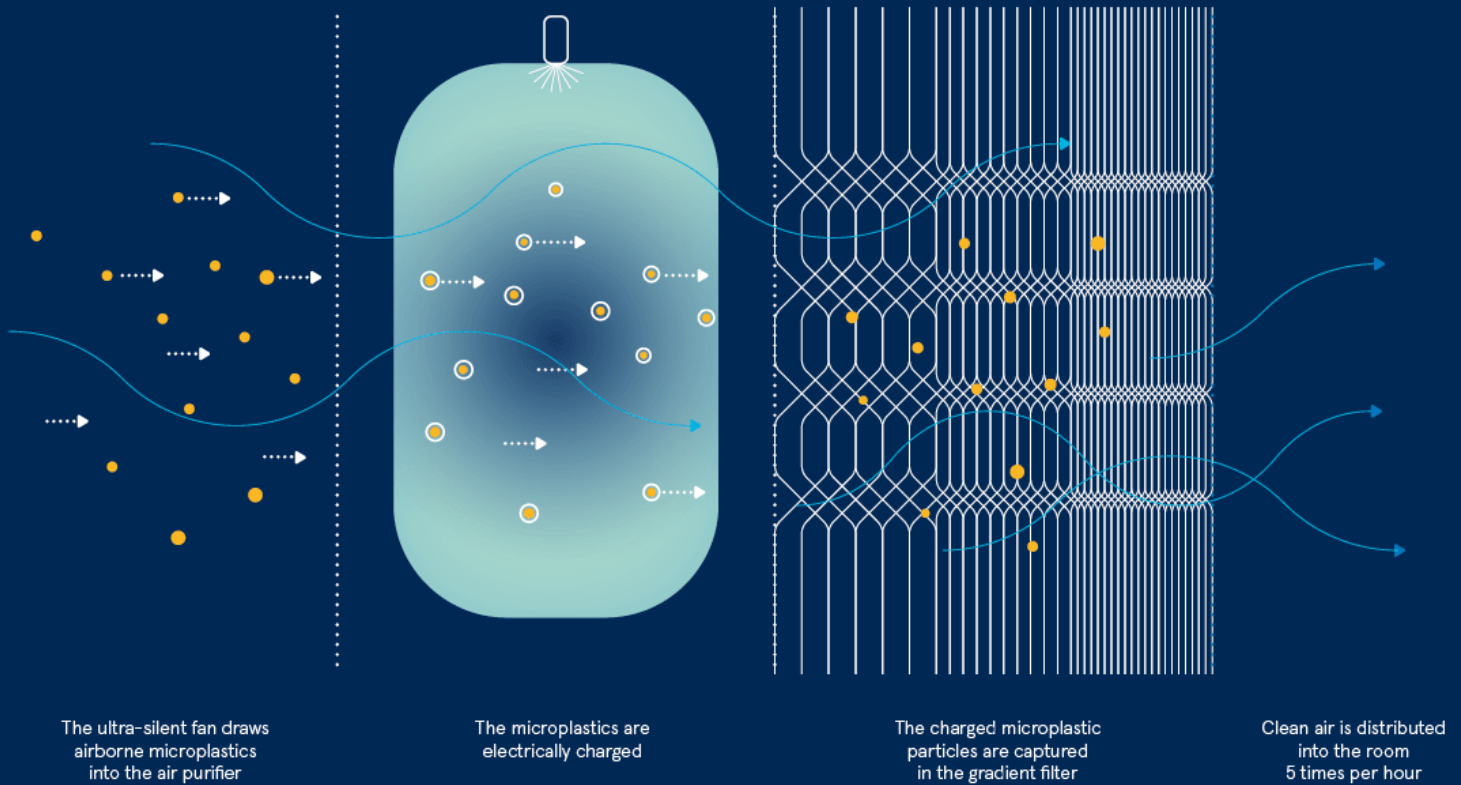


## How HEPASilent™ technology removes microplastics from the air



Blueair HEPASilent technology removes airborne microplastics

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## Blueair removes microplastics from the air

Stockholm, 5 June: In the wake of recent research on the negative human health effects of breathing microplastics, Blueair, a world-leader in air purification solutions for home and professional use, is happy to announce that all its air purifiers remove airborne microplastics.

Research published by the Fernando Pessoa University in Portugal shows that every day we breathe in up to 130 tiny plastic particles. Due to their small size, microplastics once inhaled, travel into the deep lung where they may induce lesions in the respiratory system. Microplastics found in lung tissue indicate that the body is not able to rid itself of the particles – i.e. that the

microplastics are bio-persistent.

“Microplastic particles penetrate the deep lung tissue and cannot be removed, or “digested”, by the human immune systems” explains Kevin Luo, PhD in Particle Deposition in the Human Respiratory System, and senior air filtration expert with Blueair. “The smallest particles can also pass into the bloodstream and cause cardiovascular and cerebrovascular diseases, induce cancer, and affect the human immune and nervous system” continued Luo.

Luo noted that children are particularly at risk: “Children breathe more rapidly than adults, taking in more air in relation to their body weights. This makes them more vulnerable to microplastic pollution. Children are also more at risk as their respiratory systems are still developing – and small children often spend time playing on the floor, where microplastics settle in the form of dust” said Luo.

### **Airborne microplastics: Concentration higher in indoor air**

Microplastics have been found in both indoor and outdoor air. However, the concentration of microplastic pollution in the indoor air is higher than outdoors according to findings presented in 2018 by researchers from École Nationales des Ponts et Chaussées. Considering that we spend about 90% of our time indoors, this poses a significant health risk.

### **Airborne microplastics: Synthetic clothing, toiletries, paint and toys**

Microplastics in the indoor air result from the fragmentation through friction, heat or light of plastic objects found in our homes. These include paint, toys, furniture and other plastic objects as well as personal care items like cosmetics, toothpaste and scrubs. Another source of microplastics found in the air is that of plastic fibres released from synthetic clothing and textiles used in home furnishings.

Airborne microplastics may also carry other toxic pollutants found in the air, from bacteria to traffic emissions, into the bloodstream from the lungs.

### **About microplastics**

Plastic particles sized between 5 mm and 0.1 um are defined as microplastics.

They are categorized as primary and secondary microplastics with primary microplastics being plastic particles, or microbeads, produced in microscopic size for use in cosmetics, toiletries and paint. Secondary microplastics are plastic fragments from larger plastic objects. Both primary and secondary microplastics are airborne and can be inhaled and harmful to humans.

### **About Blueair air purifiers**

Airborne microplastics can be removed by an air purifier tested for 0.1 um removal rate. Thanks to its unique HEPASilent™ filtration technology, Blueair air purifiers remove airborne particles down to 0.1um in size, including microplastic particles and fibres. Read more about how Blueair air purifiers remove airborne microplastics:

<https://www.blueair.com/se/campaign/microplastic>

### **Top 10 tips on how to reduce airborne microplastics at home**

1. Ensure good ventilation in your home - the concentration of airborne plastics is much higher in indoor air than in outdoor air.
2. Vacuum frequently to free your floor from microplastic dust that collects there.
3. Reduce or remove carpets, which trap plastic fibres and particles.
4. Choose a hardwood or ceramic tile floor. Vinyl and linoleum flooring can release microplastics into the air.
5. Avoid synthetic clothing as they shed plastic fibers, which can be inhaled.
6. Use organic, natural fabrics and textiles in home furnishings.
7. Do not buy toys made of plastic or that have plastic parts. Opt for wood or natural rubber toys instead.
8. Avoid cosmetics, soap, facial scrub and toothpastes containing microbeads.

9. Drink filtered tap water instead of water from single-use plastic bottles to reduce the amount of plastic you bring into your home.

10. Put an air purifier in the rooms where you spend most of your time. All Blueair air purifiers for home remove airborne microplastics.

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Blueair is a world leading producer of air purification solutions for home and professional use. Founded in Sweden, Blueair delivers innovative, best-in-class, energy efficient products and services sold in over 60 countries around the world. Blueair is part of the Unilever family of brands.

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