

Plastic microfibres : An underestimated pollutant

Each year¹:

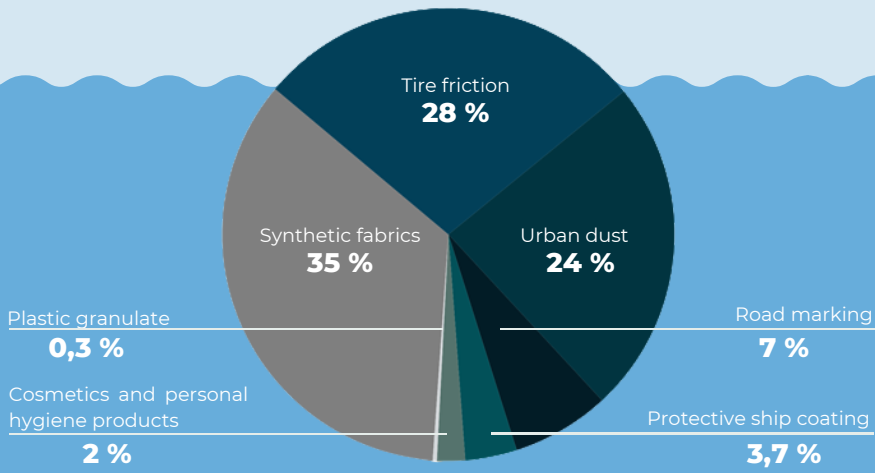


While we pay particular attention to the impact of plastic on our oceans and marine life, it equally affects land biodiversity.

What is a microplastic?

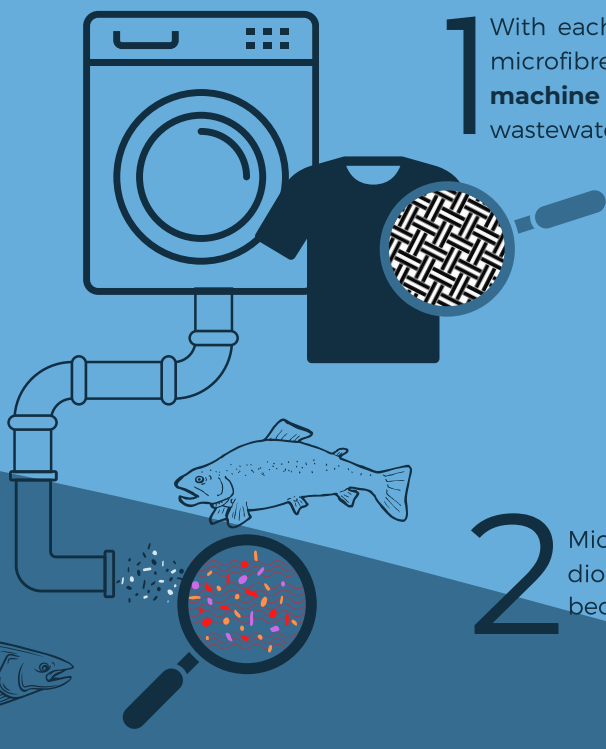
Microplastics are **plastic particles** smaller than 5 mm in size. Often invisible to the naked eye, they are produced by certain industrial sectors and cleaning products, from the degradation and fragmentation of plastic waste, and from synthetic clothing. Given their chemical stability, microplastics can **persist for a long time** in the environment.

Discharge of primary microplastic in the oceans, by source (%)



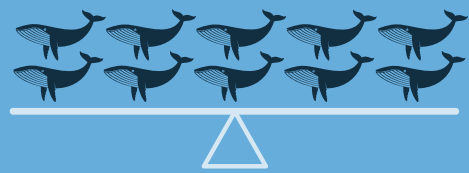
*Primary microplastics are plastics released into the environment already in microparticle form.

Microfibres, macropolluants



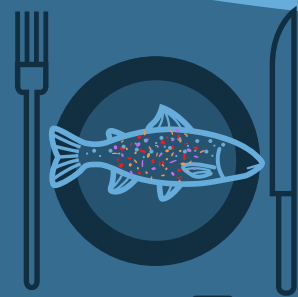
1 With each **washload**, **synthetic fabrics** release thousands of microfibres that are **not trapped by traditional washing machine filters**. About 5% of them pass through municipal wastewater treatment plants and **end up in our waterways**.

Per year, it is estimated that Canada and the United States release about **880 tons of microfibres**, which is the equivalent of **10 blue whales**.³



2 Microfibres **absorb** persistent organic pollutants, such as dioxins and organochlorine pesticides. They can then become concentrated in **the tissues of marine species**.

3 Due to **bioaccumulation** (the capacity to accumulate in the food chain), chemicals pass from plankton to larger fish, **up the food chain** to humans. They are also found in **drinking water**.⁴



4 On average a person **ingests 5 g of plastic per week** through eating and drinking. The main source of ingested plastic: **drinking water**. It is estimated that a person will consume about **1,769 pieces of plastic** per week, just through the water they drink.⁵

Solutions exist!

Washing machine **filters** have been developed in order to **reduce the amount of microfibres** released into the environment. They **trap at least 87% of plastic microfibres**.

The **GRAME**, in collaboration with participating cities and RECYC-QUÉBEC is offering a **grant to purchase a plastic microfibre filter**. Citizens will need only to pay the taxes.

You can do other things **to reduce the number of plastic particles** generated during clothes washing and **reduce your environmental impact** :



Wash clothes less often



Wash in cold water



Use liquid detergent (less abrasive)



Buy clothes made of natural fibres



Buy second-hand clothes



Environmental Enhancements