



**FROM MACRO TO MICRO:
THE MICROPLASTICS CRISIS**

What are Microplastics?

Microplastics are plastics with a size **smaller than 5mm**. They are usually found in the environment as fragments, fibres, pellets, or beads of different sizes and physico-chemical compositions.

Microplastics pollution originates as a consequence of the manufacture, during the use-phase, and disposal of products containing plastic polymers.

The background of the slide is a photograph of ocean water. It is filled with various pieces of plastic debris, including large fragments of clear and dark plastic, and a vast number of tiny, colorful microplastics in shades of purple, pink, green, and white. The water has a blue-green hue.

Let us look at the broader picture.

Microplastics are the tiny particles generated by the wear and tear of plastics **but there also are cellulosic fibers such as viscose/rayon, lyocell, and acetate also release these particles called microfibers.**

Why do we always blame plastics?

Microfibers Misconceptions

1

MOST MICROFIBERS IN THE OCEAN ARE NOT PLASTIC



2

DEGRADATION OF CELLULOSIC FIBERS IS NOT BIODEGRADABLE

A dyed cotton waistcoat showed almost no sign of degradation after 133 years of submersion in the ocean.

3

MEMBRANES ARE MOST PROMISING FOR MICROPLASTIC REMOVAL

Placed at the exit of washing machines, they also offer the possibility of reducing the number of process steps in wastewater treatment plants.

What is the solution?

As scientific research continues to expose the pervasiveness of microfibers in habitats and species around the world, concern about microfiber pollution is growing. Recognizing the magnitude of this problem, universities, companies, and governments are working to find solutions.

Additionally, while making a purchase, choosing textiles and other materials carefully might have a significant impact.

