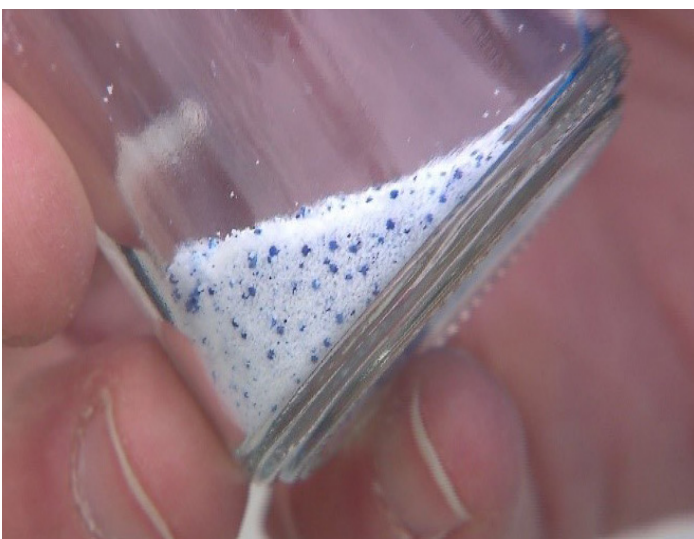


# Microplastics



**Plastic** is a very versatile material with a wide range of applications from product packaging to medical equipment. It is widely used in daily activities and it represents between **50 - 80%** of all items found in the environment. Due to its physical and chemical properties, this material takes a **long time to fragment and degrade under environmental conditions**. However, influenced by **solar radiation, temperature, and abrasion**, larger plastic items fragment over time into smaller items known as **microplastics**.

**These smaller items are** of primary or secondary origin, depending on whether they were manufactured to have microscopic dimensions, or result from fragmentation of larger items, respectively, **are known to be ingested by marine organisms**.

So far, there is not an all-inclusive standard definition that encompasses all aspects of what a microplastic is. Nonetheless, the IMP.act project proposed a definition based on a review of different literature on the topic. That definition is:

### Microplastics (MPs)

Microplastics are any synthetic, solid particle or polymeric matrix with regular or irregular shape, with size ranging between 1  $\mu\text{m}$  and 5 mm, of either primary or secondary origin, which is insoluble in water

Frias and Nash, 2019, Marine Pollution Bulletin

Microplastics might have impacts on environmental and human health, but so far there are no research studies that are assessing the health effects or risks associated with microplastic ingestion.

### References

Cole, M., Lindeque, P., Halsband, C., Galloway, T., (2011). Microplastics as contaminants in the marine environment: A review. Marine Pollution Bulletin, 62, 12, 2588-2597.

Frias JPGL, Nash, R. (2019). Microplastics: Finding a consensus on the definition. Marine Pollution Bulletin 138, pp., 145-147.

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*Managing for Microplastics: A Baseline to Inform Policy Stakeholders*



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