MICROPLASTICS

WHAT ARE MICROPLASTICS?

Microplastics are small plastic pieces less that are 5mm in size. They can be plastic fragments, fibres or pellets. Often smaller than a grain of sand and invisible to the naked eye, they have been found in all the world's oceans and on all continents, from the deepest sea to the highest mountain peaks, and even in the air that we breathe.

WHERE DO THEY COME FROM?

They come from the disposal and break up of plastic items including packaging, consumer items and industry waste, and are divided into two categories:

PRIMARY	SECONDARY
Manufactured at that size	Result from larger pieces of plastic degrading in the environment
Plastic resin pellets (nurdles) and the microbeads found in personal care and cleaning products are examples of primary microplastics	Given enough time any plastic item can end up as thousands of microplastic pieces
They enter the environment in many ways: • Unintentional loss during manufacture or transport • Product use, i.e. microbeads being washed down drains	Exposure to UV radiation from the sun, abrasion from wind and sand, and wave action are all ways secondary microplastics can form
PRIMARY MICROPLASTICS WILL BECOME SECONDARY MICROPLASTICS OVER TIME	

FAST FACTS

- Plastic resin pellets adsorb pollutants from the ocean and can be up to 1 million times more toxic than the surrounding seawater[1]
- One load of washing could release 700,000 microplastic fibres into the environment[2]
- It is estimated there are 170 trillion plastic pieces in the ocean, 1700 times more than the number of stars in the Milky Way[3]
- Microplastics have been found in more than 114 aquatic species. They are suspected of working their way up the marine food chain[4]
- Microplastics have been found in drinking water, beer and food products such as seafood and table salt[5]
- Microplastics have also been found in human tissues and organs, the health implications of which are currently unknown[6]

FAST FACTS REFERENCES

1. www.tangaroablue.org/pelletalertproject/about-plastic-resin-pellets
2. www.sciencedaily.com/releases/2016/10/1610031036S1.htm
3. www.journals.plos.org/plosone/article?id=10.1371/journal.pone.0281596
4. www.britannica.com/technology/microplastic
5. www.sciencedirect.com/science/article/abs/pii/S0269749122019613
6. www.sciencedaily.com/releases/2020/08/200817104325.htm

MICROPLASTICS ARE NOT BIODEGRADABLE

Like all plastic, microplastics are not biodegradable and once in the environment they accumulate and persist causing harm to marine life, ecosystems and habitats and even human health.

For more information visit www.tangaroablue.org

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