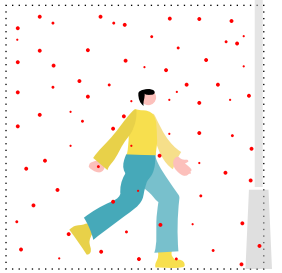
Human exposure to plastic particles and associated chemicals

B

Microplastics in the air

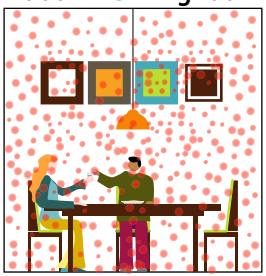
in 50 cubic meters

Outdoor



75 particles*

Indoor **Dining room**



3 000 particles*

Non-intentionally added substances

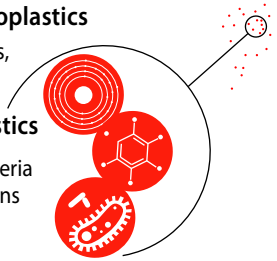
e.g. recycled plastics, food packaging

Adsorption of pollutants by microplastics

Pollutants include hazardous chemicals, antibiotics and heavy metals

Pathogens found on floating plastics

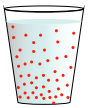
Vibrio spp., a well-known genus of bacteria containing pathogenic strains to humans and animals (e.g. cholera)



Microplastics in food



Sugar
1 item per spoonfull*
(20 gr)



Water
49 items per glass*
(250 ml)



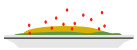
Honey
13 items per spoonfull*
(20 gr)



Beer
27 items per glass*
(250 ml)



Salt
14 items per spoonfull*
(20 gr)



Dust fallout



Fish and shellfish



Packaged food

*Maximum value referred

Sources of toxic additives exposure

Plastic products



Personal care products



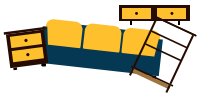
Flooring



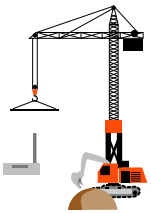
Adhesives



Furniture



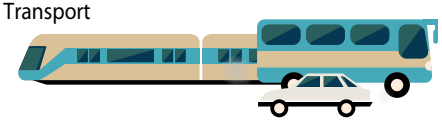
Construction



Paint



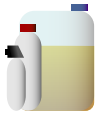
Transport



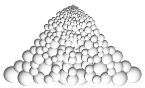
Main categories of plastic additives

Functional

Stabilizers, antistatic agents, flame retardants, plasticizers, lubricants, slip agents, curing agents, foaming agents, biocides, etc.



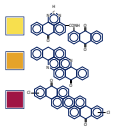
Fillers



Mica, talc, kaolin, clay, calcium carbonate, barium sulphate, etc.

Colourants

Pigments, soluble azo-colorants, etc.



Reinforcement



Glass fibres, carbon fibres, etc.

United Nations Environment Programme (2021). From Pollution to Solution: A global assessment of marine litter and plastic pollution. Nairobi.

Illustrated by GRID-Arendal/Studio Atlantis