

AEG

AEG STUDY MICROPLASTICS

— RESEARCH DEBRIEF BELGIUM & NETHERLANDS —

SETTING THE SCENE

- Microplastic pollution has moved into virtually every fissure on earth and textiles are one of the four main sources.
- Once in the environment, microplastics do not biodegrade and their continued release contributes to permanent pollution of our ecosystems and food chains.
- Laundering alone causes around half a million tons of plastic microfibers to be released into the ocean every year – the equivalent of almost three billion polyester shirts.

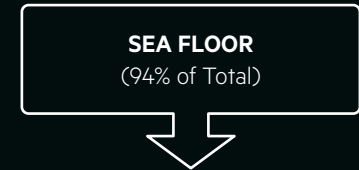
TOTAL PLASTIC ENTERING THE MARINE ENVIRONMENT

12.2

Million tonnes per annum

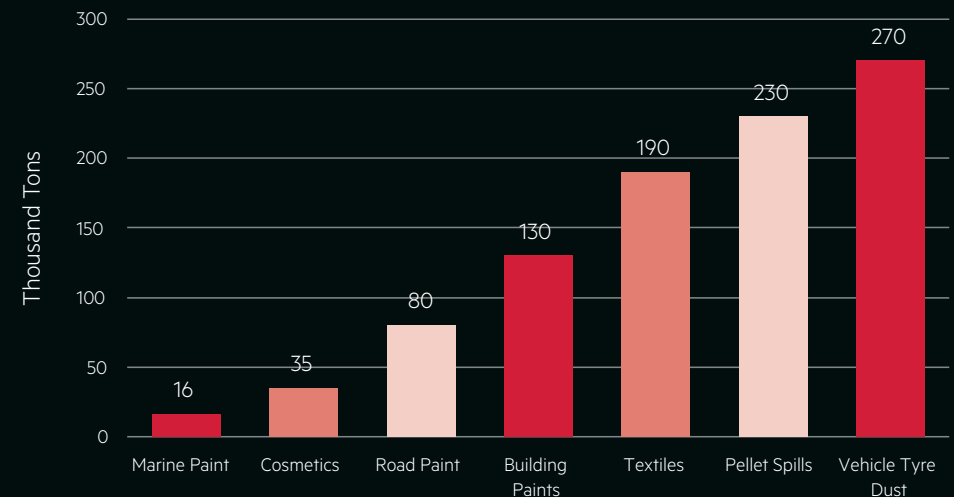
BEACHES
(5% of Total)

OCEAN SURFACE
(1% of Total)



Primary Microplastic

0.95 Million tonnes per annum



<https://www.eunomia.co.uk/reports-tools/plastics-in-the-marine-environment/>

WHAT CAN WE SAY ABOUT MP FROM LAUNDRY?

The amount of microplastics released from synthetic materials can depend on a number of factors.

Washing	Time, temperature, detergent, softener, water: fabric ratio, equipment
Drying	Time, temperature, equipment
Polymer type	Polyester, nylon, acrylic
Yarn	Size, length, twist
Fabric	Construction, finishing, cutting, sewing
Age of garments	New, pre-owned

A study showed that a new garment may shed as many as 8 times more microfibers than the same garment after 5 washes. After that, microfiber release stabilizes at a much lower level.

Electrolux has concluded that the average number of microplastics obtained was between 20 and 150 mg for a 3.6 kg load during 10 cycles (*Mixed load 75% Polyester and 25% Cotton*) corresponding to 5-40 mg/kg.

RECOGNIZING THE ENVIRONMENTAL ISSUE

To what extent do you agree or disagree with the following statement: 'Microplastics pose a serious environmental issue'	EUROPE	BELGIUM	NETHERLANDS
Strongly agree	53%	50%	33% ↓
Somewhat agree	30%	32%	41% ↑
Neither	14%	15%	23% ↑
Disagree	3%	2%	3% ↑

RECOGNIZING THE HEALTH ISSUE

To what extent do you agree or disagree with the following statement: 'Microplastics pose is a serious health issue'	EUROPE	BELGIUM	NETHERLANDS
Strongly agree	41%	38% ↓	24% ↓
Somewhat agree	35%	37%	38%
Neither	20%	22%	30% ↑
Disagree	4%	5%	7% ↑

MYTH BUSTING

MORE OF A PROBLEM IF YOU LIVE NEAR WATER?

Nearly a third of Europeans (29%) think microplastic pollution from laundry is more of a problem for people who live near water. 28% think the same in Belgium as do 32% in Netherlands.

36% of Europeans said 'don't know' as did 33% of Belgians and 41% of Dutch.

ARE WE WILLING TO **CHANGE?**

How willing or unwilling are you to do things that require your personal effort to help tackle climate change?	EUROPE	BELGIUM	NETHERLANDS
Very willing	27%	27%	18% ↓
Somewhat willing	48%	49%	48%
Neither willing nor unwilling	19%	19%	28% ↑
Somewhat unwilling	4%	4%	4%
Very unwilling	2%	1%	2%

TO HELP REDUCE MICROPLASTIC POLLUTION
WE NEED TO HELP EDUCATE CONSUMERS
ON THE MATERIALS THEY BUY AND OWN TO
THEN HELP THEM CARE FOR THEM IN A MORE
POSITIVE WAY.

OVER 90% OF PEOPLE DO NOT REALISE HOW MUCH PLASTIC IS THE CLOTHES THEY OWN

What percentage of clothes you own, would you estimate, are made of plastic fibers? (Answer – over 60%)	EUROPE	BELGIUM	NETHERLANDS
Not aware (guessed wrong)	94%	91%	93%
Average	35%	37.3% ↑	32.1% ↓

HOW WELL DO YOU KNOW YOUR FIBERS?

For each of the following fibers, please select whether you think it is a natural, synthetic or plastic fiber	EUROPE	BELGIUM	NETHERLANDS
Nylon	68% did not know it was plastic	77% ↑	70%
Polyester	62%	59%	73% ↑
Spandex	72%	74%	71%
Cotton	20% did not know it was natural	22%	27% ↑
Silk	27%	27%	40% ↑
Linen	28%	26%	38% ↑

HOW OFTEN DO YOU CHECK LABELS FOR **SYNTHETIC FREE FIBERS**?

When buying new clothes, do you ever actively look for labels that indicate they are free of synthetic fibers?	EUROPE	BELGIUM	NETHERLANDS
Yes, all the time	18%	12% ↓	9% ↓
Yes, sometimes	46%	42% ↓	37% ↓
No, never	30%	42% ↑	48% ↑
N/A/I don't know	7%	4% ↓	6%

HOW OFTEN DO YOU LOOK AT WHAT CLOTHES **ARE MADE OFF?**

How often do you look at a care label to see what the clothes / garment is made from?	EUROPE	BELGIUM	NETHERLANDS
Yes, all the time	22%	15% ↓	12% ↓
Yes, sometimes	32%	29%	26% ↓
No, never	27%	28%	35% ↑
N/A/I don't know	13%	17% ↑	17% ↑
N/A/I don't know	6%	11% ↑	10% ↑

ATTENTION TO CARE LABELS

How often do you follow the washing instructions on the care label when doing laundry?	EUROPE	BELGIUM	NETHERLANDS
Always	24%	23%	15% ↓
Often	37%	36%	30% ↓
Sometimes	23%	20%	29% ↑
Rarely	10%	12% ↑	14% ↑
Never	4%	5%	7% ↑
N/A – I never do laundry	3%	4%	4%

SOLUTIONS – ARE PEOPLE AWARE OF THEM AND
DO THEIR BEHAVIORS SUPPORT AWARENESS?

FIVE THINGS WE CAN ALL DO TO REDUCE MICROPLASTIC POLLUTION FROM SYNTHETIC FIBERS

1. WASH LESS

As many as 700,000 microfibers can be released from a single load of laundry.

2. KEEP CLOTHES LONGER AND WEAR THEM MORE OFTEN

According to research, the average number of times a garment is worn, before being disposed of, is ten.

3. WASH FULL

Larger wash loads have been shown to reduce the release of microfibers, due to less friction and a lower ratio of water to fabric.

4. WASH LOWER

Studies have shown washing at 40°C shed more fibers than washing at 30°C.

5. INSTALL A MICROPLASTIC FILTER OR USE ALTERNATIVE DEVICES

such as washing bags and balls which have been proven to reduce microfiber release into wastewater.

WASH LOWER

Do you think wash temperature has an influence on the amount of microplastics being released from clothes?	EUROPE	BELGIUM	NETHERLANDS
YES	48%	49%	54% ↑
NO	16%	15%	17%
DON'T KNOW	36%	36%	28% ↓

WASH LOWER

Do you think wash temperature has an influence on the amount of microplastics being released from clothes?	EUROPE	BELGIUM	NETHERLANDS
Reducing the wash temperature	44%	48% ↑	48% ↑
Washing less	43%	47%	43%
Washing full loads	37%	31% ↓	35%
Washing shorter cycles	31%	32%	39% ↑
Washing longer cycles	9%	7%	9%
Washing half loads	7%	7%	8%
Increasing the wash temperature	7%	6%	9% ↑
Washing more	6%	5%	7%
None of the above	3%	2%	3%
I don't know	14%	15%	11% ↓

WASH TEMPERATURES

Do you think wash temperature has an influence on the amount of microplastics being released from clothes?	EUROPE	BELGIUM	NETHERLANDS
Cold	4%	2% ↓	1% ↓
20 degrees	3%	2%	3%
30 degrees	32%	44% ↑	38% ↑
40 degrees	44%	34% ↓	43%
50 degrees	4%	4%	4%
60 degrees	9%	9%	7% ↓
Higher than 60 degrees	1%	1%	1%
I don't know	3%	3%	3%

WHAT WOULD ENCOURAGE YOU TO **CHANGE BEHAVIOUR**?

Which of the following benefits would encourage you the most to wash at lower temperatures (less than 30 degrees) more than you currently do? Select up to 2 options	EUROPE	BELGIUM	NETHERLANDS
If it made clothes last longer	37%	33% ↓	36%
If it saved me money	35%	38% ↑	44% ↑
If it reduced energy use	33%	38% ↑	36%
If it reduced the release of microplastics	31%	26% ↓	21% ↓
If it reduced CO ₂ emissions	20%	24% ↑	16% ↓
None of these	8%	6% ↓	6%

BARRIERS TO WASHING AT **LOWER TEMPERATURES?**

Please think back to the last time you washed at 30 degrees or lower. Which of the following describes the outcome?	EUROPE	BELGIUM	NETHERLANDS
I was happy with the outcome	39%	45% ↑	37%
I was unhappy because stains did not come out	18%	16%	19%
I was unhappy because my laundry was not clean enough	18%	13% ↓	17%
I don't know, I didn't really think about it	17%	16%	18%
I was unhappy because smells did not come out	15%	13%	18% ↑
N/A/None of the above	7%	5% ↓	5%

WASH FULL

How often do you follow the washing instructions on the care label when doing laundry?	EUROPE	BELGIUM	NETHERLANDS
Always	38%	34% ↓	34% ↓
Often	40%	45% ↑	41%
Sometimes	17%	14% ↓	20% ↑
Rarely	4%	5%	4%
Never	1%	2% ↑	1%

DESIRE FOR A MICROPLASTIC FILTER

How likely or unlikely are you to buy a microplastics filter for your washing machine?	EUROPE	BELGIUM	NETHERLANDS
Very likely	22%	28% ↑	14% ↓
Somewhat likely	36%	35%	27% ↓
Neither likely nor unlikely	25%	23%	33% ↑
Somewhat unlikely	8%	8%	12% ↑
Very unlikely	5%	3% ↓	9% ↑
N/A – I already have a microplastics filter	1%	1%	2%
N/A – I do not own a personal washing machine	4%	1% ↓	3%

EXPLORING RELATIONSHIPS
WITH OUR APPLIANCES

SETTINGS

Thinking about when you do the laundry, how many settings do you think you typically use?	EUROPE	BELGIUM	NETHERLANDS
1 to 2	44%	44%	35% ↓
3 to 4	33%	33%	33%
5 to 6	9%	8%	12% ↑
7 to 8	5%	4%	9% ↑
9 to 10	2%	2%	3% ↑
11+	1%	1%	0%
I don't know	6%	9% ↑	7%
Average	3.1%	3.1%	3.6% ↑

DEFAULT TIME

Do you keep the default time when you choose a washing program?	EUROPE	BELGIUM	NETHERLANDS
Yes, I usually keep the default time and know it could be changed	46%	39% ↓	41% ↓
Yes, I keep the default time but I didn't know it could be changed	29%	29%	30%
No, I usually increase the time	2%	2%	3%
No, I usually reduce the time	17%	23% ↑	23% ↑
I don't know	6%	7%	4%

DEFAULT TEMPERATURE

Do you keep the default temperature when you choose a washing program?	EUROPE	BELGIUM	NETHERLANDS
Yes, I usually keep the default temperature and know it could be changed	48%	41% ↓	44% ↓
Yes, I keep the default temperature but didn't know it could be changed	23%	23%	27%
No, I usually increase the temperature	2%	2%	2%
No, I usually lower the temperature	21%	28% ↑	22%
I don't know	5%	6%	5%

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