Exploring the influence of washing activities on the transfer of fibres in forensic science – supplementary information

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1. **Calculation of uncertainty – barrel**
2. **Uncertainty related to the graduation of the barrel (calibration)**

To calibrate the barrel, a 500 ml measuring cylinder was filled up to the 500 ml graduation and poured into the barrel. At the first calibration line on the barrel, the uncertainty on the position of the line corresponds to the uncertainty on the measured volume (standard uncertainty of reading ):

1. **The measuring cylinder used was graduated every 10 ml, therefore:**

The second graduation was obtained by adding again 500 ml of water using the same measuring cylinder, and the uncertainty is therefore calculated as:

For the Nth graduation, the uncertainty is and the variance is:

1. **Uncertainty related to the reading of the volume in the barrel**

The barrel was not graduated with consistent precision and therefore if a reading was done between graduations N and (N+1), the standard reading uncertainty was calculated as:

The barrel was graduated every 500 ml, therefore:

1. **Considering calibration and reading uncertainty**

To consider these uncertainties (calibration and reading) on ​​the estimation of the volume V, between V(N+1) and V(N):

1. **Confidence interval**

One single measure of the volume of water in the barrel was done each wash. The Guide to the expression of Uncertainty in Measurement (GUM) recommends calculating the confidence interval (expended uncertainty ) for a confidence level of 95 % as:

*NOTE: Considering a case where the volume read on the barrel is 24 L, the uncertainty linked to this measurement will be:*

*Based on this information, it is not unreasonable to assume that the value of the volume of wastewater (V) lies with equal probability in the interval I between 23.855 L to 24.144. L*

1. **Calculation of uncertainty – stainless steel filters**

To record the mass of fibres released in the wastewater during a wash, 5 stainless steel filters (Spectra Mesh®, 90 mm diameter, 105 µm were used. One filter was used as a reference and was weighed as a control.

The mass of the filters was measured with a precision laboratory balance (Mettler AT200, weighing capacity 205 g, readability 0.1 mg, reproducibility 0.4 to 0.7 for the range 0 to 200 g) before and after each washing cycle. A 50 ml beaker was used to raise the height of the filter being placed on the scale to avoid having the edges of the filter touching the side of the balance as the diameter of the filter was larger than the weighing pan. The balance (with the beaker on the weighing pan) was tared between each measurement and a total of 5 measurements per filter were recorded prior to and after a washing experiment. An example of mass recording for a given experiment is presented in Table 1.

Table 1: Example calculation for the weight of fibres released in the wastewater during wash number W001. F2 corresponds to the stain-less filter number 2 used for the filtration. and correspond to the variations between the filters (sample and reference). and correspond to the uncertainty associated with the mean for both the filters (sample and reference).

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **W001** | | | | | | | |
| Filter  Measure | Reference (FA) | | | F2 | | | |
| before (BW)  (mg) | after (AW)  (mg) | | before (BW)  (mg) | | after (AW)  (mg) | |
| 1 | 1360.1 | 1360.3 | | 1361.0 | | 1428.1 | |
| 2 | 1360.2 | 1360.2 | | 1361.2 | | 1428.2 | |
| 3 | 1360.2 | 1360.3 | | 1361.2 | | 1428.1 | |
| 4 | 1360.3 | 1360.2 | | 1361.1 | | 1428.1 | |
| 5 | 1360.1 | 1360.4 | | 1361.0 | | 1428.0 | |
| **Average (**) | 1360.18 | 1360.28 | | 1361.1 | | 1428.1 | |
| σ | 0.083666003 | 0.083666003 | | 0.1 | | 0.070710678 | |
| **SEM** | 0.037 | 0.037 | | 0.045 | | 0.032 | |
| **difference in weight (mg)** | 0.1 | | | 67.0 | | | |
| **Standard uncertainty (SU)** | 0.053 | | | 0.055 | | | |
| **Final weight** | 69.9 mg | |  | | | | |
| **Final SU** | 0.076 mg | |  | |  | |  |

For each wash cycle and following the Guide to the expression of uncertainty in measurement [147], the average of both filters (e.g. sample filter labelled F2 and reference filter labelled FA in Table 1) were calculated:

with the number of measurements for the wash cycle and each individual measurement. The standard deviation and the standard error of the mean were also obtained with the following equations:

The variations for each filter (sample and reference) were calculated by subtracting the average weight of the filter before filtration from the average weight of the filter after the washing cycle and the filtration process:

with for the average after the filtration cycle and for the average for the clean filter taken before the washing cycle.

The weight of the fibres in the filter for a given wash W was calculated as the variation difference between the sample and reference filter:

The uncertainty associated with the mean ( and for the reference filter and filter 2 were calculated as seen below:

and

The combined uncertainty associated with was calculated as followed:

The expanded uncertainty U is obtained by multiplying the combined standard uncertainty by a coverage factor k [148]:

with being the measurement results and k range between 2 and 3.

It is generally accepted that the measurand (i.e., a quantity or object intended to be measured) *Y* is greater than or equal to  *- U*, and is less than or equal to + U, commonly written as *Y =  ± U*. This interval can be expected to include a large fraction of the distribution of values that could reasonably be attributed to Y.

The value of the coverage factor k, is chosen based on the level of confidence required of the interval − U to + U. In general, one can assume that taking k = 2 produces an interval having a level of confidence of approximately 95 per cent and that taking k = 3 produces an interval having a level of confidence of approximately 99 per cent [147]. In this work the chosen interval I was:

When applied to the previous example seen in Table 1, the confidence interval becomes:

1. **Transfer device – instruction and list of components**

A transfer apparatus was adapted from the Arduino-Based uniaxial Tensile Tester developed by Arrizabalaga et al. [149]. The list of components is given in Table 2 and the wiring details in Figure 1. The transfer device was made of a wooden frame with a sliding rail on each side to guide the moving platform on which a load cell was mounted. A 12 V DC linear actuator controlled with Double Pole Double Throw (DPDT) 3 positions momentary rocker switch was attached to the moving central platform to allow linear up and down displacement. A metallic chain was used to connect the load cell to the square frame purposely designed to surround and pull the Perspex clock with its recipient swatch. A pulley plumb to the load cell allowed the linear upward movement to be directly translated into a horizontal displacement, a straight-line motion in one direction.

Table 2: list of components used to build the transfer device.

|  |  |
| --- | --- |
| **Items** | **Supplier** |
| Wood | DIY shop |
| Drawer Slide | Screwfix |
| 5 kg load cell | RobotShop |
| HC-SR04 Ultrasonic sensor | Amazon |
| Arduino Uno R3 | RS components |
| INA125P | RS components |
| 100 Ω resistor | RS components |
| Breadboard and Jumper wires | RS components |
| Miscellaneous hardware  (Screws, bolts, nuts etc.) | DIY shop |
| Phidgets | RobotShop |
| Metal chain | Amazon |
| Linear actuator (GLA200 200 mm stroke) | Gimson Robotics |
| DPDT 3 position momentary rocker switch | Gimson Robotics |

A diagram of a circuit board

Description automatically generated

Figure 1: Wiring details

adapted from the article of Arrizabalaga et al. [149] in Wiring configuration for the 5 kg load cell (1), the ultrasonic proximity sensor (2) connected to the Arduino Uno microcontroller (3). A breadboard (not shown) was used to connect these components with the addition of a 100 Ω resistor (4) and an INA125P signal amplification chip (5).

1. **Transfer device – Arduino code**

Arduino is a platform used for building electronics projects: it consists of both a physical programmable circuit board (often referred to as a microcontroller) and a software, also called Integrated Development Environment (IDE). It runs on a computer and is used to write and upload computer code to the physical board. The IDE is open source and can be downloaded for free at:

<https://www.arduino.cc/en/Main/Software>

The code used for this thesis was adapted from the article of Arrizabalaga *et al.* [149], and is presented below. First, the code has to be copied in the Arduino IDE: save this code under a folder of the name of your choice. Then, connect the circuit board to the computer by USB.

In the Arduino software, under Tools/Board/Board manager, select “Arduino AVR Boards” and install it. Then, under Tools/Board/Arduino AVR Boards, select “Arduino Uno”. Finally, under Tools/Port, select the USB port connected to the Arduino (e.g., COM7 Arduino Uno).

In the software, click on Verify and then Upload. Click on “Serial plotter” and check that the Arduino Uno is recording. This is the Arduino being set up.

To save the data, follow the instructions provided in page 9.

**Scrip**

//global  
String dataLabel1 = "analogValue";  
String dataLabel2 = "load";  
String dataLabel3 = "distance";  
bool label = true;  
  
//note: the in array should have increasing values.  
//the values to enter in float out[] = {...}vett0 below are the values of the weights used for the calibration  
float **out**[] = {0, 20.14, 49.66, 99.61, 199.47, 299.13, 399.09, 498.78, 598.56, 698.56, 799.09, 898.37, 998.68};  
//the values to enter in float in[] = {...} below are the values given by the load cell using the calibration weights  
float **in**[] = {16.32, 17.19, 18.75, 21.98, 31.21, 43.06, 55.87, 68.44, 81.2, 94.07, 106.51, 119.13, 131.91};  
//arraySize correspond to the number of weights used for the calibration  
int arraySize = 13;  
  
float analogValueAverage = 0;  
long time = 0;  
int timeBetweenReadings = 100;  
// Trig Pin of the HC-SR04 on input 02  
int trigPin = 2;  
// Echo Pin of the HC-SR04 on input 04  
int echoPin = 4;  
  
void setup() {  
 Serial.begin(9600);  
}  
  
void loop() {  
 // Load cell on Analog input A0  
 //print out column headers  
 **while** (label) { //runs once  
 Serial.print(dataLabel1);  
 Serial.print(",");  
 Serial.print(dataLabel2);  
 Serial.print(",");  
 Serial.println(dataLabel3);  
 label = false;  
 }  
  
 int analogValue = analogRead(0);  
 analogValueAverage = 0.99 \* analogValueAverage + 0.01 \* analogValue;  
  
 **if** (millis() > time + timeBetweenReadings) {  
 float load = FmultiMap(analogValueAverage, **in**, **out**, arraySize);  
 Serial.print(analogValueAverage);  
 Serial.print(",");  
 Serial.print(load, 2);  
 Serial.print(",");  
 time = millis();  
 long duration;  
 float cm;  
 pinMode(echoPin, INPUT);  
 pinMode(trigPin, OUTPUT);  
 digitalWrite(trigPin, LOW);  
 delayMicroseconds(2);  
 digitalWrite(trigPin, HIGH);  
 delayMicroseconds(10);  
 digitalWrite(trigPin, LOW);  
 duration = pulseIn(echoPin, HIGH);  
  cm = microsecondsToCentimeters(duration);  
 Serial.println(cm);  
 delay(10);  
 }  
  
}  
  
float FmultiMap(float x, float \* \_in, float \* \_out, uint8\_t size)  
{  
 // take care the value is within range  
 // x = constrain(x, \_in[0], \_in[size-1]);  
 **if** (x <= \_in[0]) **return** \_out[0];  
 **if** (x >= \_in[size - 1]) **return** \_out[size - 1];  
  
 // search right interval  
 uint8\_t pos = 1; // \_in[0] allready tested  
 **while** (x > \_in[pos]) pos++;  
  
 // this will handle all exact "points" in the \_in array  
 **if** (x == \_in[pos]) **return** \_out[pos];  
  
 // interpolate in the right segment for the rest  
 **return** (x - \_in[pos - 1]) \* (\_out[pos] - \_out[pos - 1]) / (\_in[pos] - \_in[pos - 1]) + \_out[pos - 1];  
}  
  
float microsecondsToCentimeters(long microseconds) {  
 **return** (microseconds \* 0.034029) / 2;

1. **Python code for Arduino Data logger**

This is the scrip to save the data collected using an Arduino Uno. To install python, used the following link:

<https://www.python.org/downloads/>.

When Python is installed, install the Python Serial Port Extension. This can be done following this link:

<https://pypi.org/project/pyserial/#files>

When the programmes are installed, ensure you can run Python and pip from the command line. This can be done by following this link:

https://packaging.python.org/en/latest/tutorials/installing-packages/#id12

Finally, ensure that pip, setuptools, and wheel are up to date, following the same link as above.

Then, create a folder “ArduinoExport” on your Desktop. Open a generic text editor, such as Notepad, and create a new file: copy paste the code below and save it as a python file with the name “read-serial.py”

The script was adapted from: <https://www.youtube.com/watch?v=vayAp84vea8>

The code run with Common Prompt (Windows machine). Open command prompt and specify the location of your “read-serial.py” file, using the following command:

“cd C:\Desktop\ArduinoExport”

Then, you can run record the data by typing “py read-serial.py” in command prompt. If you want to change the name, save the py document after and reload Arduino using the “upload” button.

**Scrip**

import serial  
  
arduino\_port = "COM7" #serial port of Arduino  
baud = 9600 #arduino uno runs at 9600 baud  
fileName="your-file-name.csv" #name of the CSV file generated  
  
ser = serial.Serial(arduino\_port, baud)  
print("Connected to Arduino port:" + arduino\_port)  
file = open(fileName, "a")  
print("Created file")  
  
 #display the data to the terminal  
getData=str(ser.readline(),'utf-8')  
data=getData[0:][:-2]  
print(data)  
  
 #add the data to the file  
file = open(fileName, "a") #append the data to the file  
file.write(data + "\n") #write data with a newline  
  
 #close out the file  
file.close()  
  
samples = 10 #how many samples to collect  
print\_labels = False  
line = 0 #start at 0 because our header is 0 (not real data)  
**while** line <= samples:  
 # incoming = ser.read(9999)  
 # if len(incoming) > 0:  
 **if** print\_labels:  
 **if** line==0:  
 print("Printing Column Headers")  
 **else**:  
 print("Line " + str(line,'utf-8') + ": writing...")  
 getData=str(ser.readline(),'utf-8')  
 data=getData[0:][:-2]  
 print(data)  
  
 file = open(fileName, "a")  
 file.write(data + "\n") #write data with a newline  
 line = line+1  
  
print("Data collection complete!")  
file.close()

1. **ImageJ scripts**

This is the script to count the fibres on top of the recipient garments. The free software ImageJ for MacOS, Linux and Windows can be downloaded at: <https://imagej.nih.gov/ij/download.html>.

**Image J set up.**

Once ImageJ is installed, open ImageJ and go to ImageJ\Image\Overlay\Label: ensure that the bellow parameters are selected:

A screenshot of a computer

Description automatically generated

Then, in ImageJ, open an image. Go to Analyse\Analyse Particles, and ensure the below parameters are selected:

A screenshot of a computer

Description automatically generated

Then go the menu Analyse\Analyse Particles\Set Measurement, and ensure the bellow parameters are selected:

A screenshot of a computer

Description automatically generated

**Preparing the file containing the cropping parameter**

First, a .csv file containing the cropping parameter and the L\*a\*b\* colour space parameter selected for each image to process had to be created. The .csv must contain the following column name an information as:

A screenshot of a spreadsheet

Description automatically generated

The Xstart, Ystart, Xrange, Yrange correspond to the value to crop the images. The Lmin, Lmax, Amin, Amax, Bmin, Bmax correspond to the value to set up the colour threshold in the L\*a\*b\* colour space.

**Run the macro**

To implement the macro into ImageJ, the subsequent steps need to be followed:

* Open the software ImageJ
* In the tab Plugins, select New and then Macro
* In the window that has opened, copy and paste the code below
* In the tab File, select “save as” as choose a saving directory.
* Once the macro is saved, you must open it by dragging it from the saving folder to ImageJ, in the lower part of the software, as showed below in red:

A screenshot of a computer

Description automatically generated

* Once opened, to run the macro, select the tab Macro and then Run Macro
* A source folder will have to be selected (where the image to analyse are located) as well as an output folder (where the image analysed will be saved)

In the macro itself, the file path of the .csv file containing the cropping parameter and the L\*a\*b\* colour space parameter selected for each image to process has to be enter in the line filePath="C:/your path/for batch.csv”, ligne 9. The particule count size threshold has to be enter manually in the line run("Analyze Particles...", "size=500-Infinity pixel circularity=0.00-0.80 display clear summarize add");”, highlighted in red bellow. The “size=” correspond to the particule count size threshold that need to be change. This number was 500 for the red fibres and 1000 for the yellow fibres.

**Macro**

// This macro processes all the images in a folder and any subfolders.  
  
extension = ".TIF"; //This could be change if .tif or .png are used instead  
dir1 = getDirectory("Choose Source Directory ");  
dir2 = getDirectory("Choose Destination Directory ");  
  
filePath="C:/your path/for batch.csv";  
Table.**open**(filePath);  
  
imName=Table.getColumn("ImageName");  
XstartValue=Table.getColumn("Xstart");  
YstartValue=Table.getColumn("Ystart");  
XrangeValue=Table.getColumn("Xrange");  
YrangeValue=Table.getColumn("Yrange");  
LminValue=Table.getColumn("Lmin");  
LmaxValue=Table.getColumn("Lmax");  
AminValue=Table.getColumn("Amin");  
AmaxValue=Table.getColumn("Amax");  
BminValue=Table.getColumn("Bmin");  
BmaxValue=Table.getColumn("Bmax");  
SummaryName=Table.getColumn("SummaryOutputName");  
  
Qtotal = lengthOf(imName);  
print(Qtotal);  
  
 setBatchMode(true);  
 n = 0;  
 processFolder(dir1);  
  
 **function** processFolder(dir1) {  
 list = getFileList(dir1);  
 for (i=0; i<list.length; i++) {  
 **if** (endsWith(list[i], "/"))  
 processFolder(dir1+list[i]);  
 **else** **if** (endsWith(list[i], extension))  
 processImage(dir1, list[i]);  
 }  
 }  
  
 **function** processImage(dir1, name) {  
  
 **open**(dir1+name);  
 print(n++, name);  
 // add code here to analyze or process the image  
// Transer experiment code  
  
m = 0;  
for (m=0; m<Qtotal; m++){  
**if** (imName[m] == name){   
  
makeRectangle(XstartValue[m],YstartValue[m],XrangeValue[m],YrangeValue[m]);  
run("Crop");  
  
// Color Thresholder 1.53e  
// Autogenerated macro, single images only!  
min=**new**Array(3);  
max=**new**Array(3);  
filter=**new**Array(3);  
a=getTitle();  
call("ij.plugin.frame.ColorThresholder.RGBtoLab");  
run("RGB Stack");  
run("Convert Stack to Images");  
selectWindow("Red");  
rename("0");  
selectWindow("Green");  
rename("1");  
selectWindow("Blue");  
rename("2");  
min[0]=LminValue[m];  
max[0]=LmaxValue[m];  
filter[0]="pass";  
min[1]=AminValue[m];  
max[1]=AmaxValue[m];  
filter[1]="pass";  
min[2]=BminValue[m];  
max[2]=BmaxValue[m];  
filter[2]="pass";  
for (i=0;i<3;i++){  
 selectWindow(""+i);  
 setThreshold(min[i], max[i]);  
 run("Convert to Mask");  
 **if** (filter[i]=="stop") run("Invert");  
}  
imageCalculator("AND create", "0","1");  
imageCalculator("AND create", "Result of 0","2");  
for (i=0;i<3;i++){  
 selectWindow(""+i);  
 close();  
}  
selectWindow("Result of 0");  
close();  
selectWindow("Result of Result of 0");  
rename(a);  
// Colour Thresholding-------------  
  
run("8-bit");  
setAutoThreshold("Default");  
//run("Threshold...");  
//setThreshold(0, 141);  
setOption("BlackBackground", false);  
run("Convert to Mask");  
  
run("Maximum...", "radius=3");  
run("Options...", "iterations=3 count=1 do=Close");  
run("Remove Outliers...", "radius=1 threshold=50 which=Dark");  
run("Analyze Particles...", "size=500-Infinity pixel circularity=0.00-0.80 display clear summarize add");  
run("Labels...", "color=red font=72 show draw");  
run("Flatten");  
  
selectWindow("Results");  
saveAs("Results", dir2 + name + "\_Results" + ".csv");  
saveAs("PNG", dir2 + name + "\_Results" + ".png");  
Table.save(dir2+"Output\_Summary.csv","Summary");  
   
print(XstartValue[m],YstartValue[m],XrangeValue[m],YrangeValue[m],LminValue[m],LmaxValue[m],AminValue[m],AmaxValue[m],BminValue[m],BmaxValue[m]);  
//m = m + 1;  
//}else {  
// m = m + 1;  
//print(m);  
}  
}  
}  
  
NumberofRows=Table.size("Summary");

1. **Contact areas subjected to transfer - 2nd Exp (5 garments washed together)**

Table 3: Contact areas subjected to transfer on top of the donor garments, depending on the wash number.

|  |  |  |  |
| --- | --- | --- | --- |
| Garments  Contact area | 5 garments | 12 garments | 1 garment |
| CA1 | Every wash | Every wash up to wash 23, then every two washes | Every wash |
| CA2 | Every wash up to wash cycle 17, then every two washes |
| CA3 |
| CA4 | Every 5 wash |
| CA5 | Every 10 wash |
| CA6 | Every wash |
| CA7 | Every wash up to wash cycle 17, then every two washes |
| CA8 |
| CA9 | Every 5 wash |
| CA10 | Every 10 wash |

1. **Raw data – Wastewater volume**

Table : Volume of wastewater (L) released for each of the 15 wash performed with the 1 red cotton donor garment.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Wash Number | Wash (L) | Rinse (L) | Total (L) | Wash Number | Wash (L) | Rinse (L) | Total (L) |
| 1 | 5.5 | 18 | 23.5 | **9** | 5.5 | 16.5 | 22 |
| 2 | 5.5 | 17 | 22.5 | **10** | 5.5 | 17 | 22.5 |
| 3 | 5.5 | 15.5 | 21 | **11** | 5.5 | 16.5 | 22 |
| 4 | 5.5 | 15.5 | 21 | **12** | 5.5 | 17 | 22.5 |
| 5 | 5.5 | 17 | 22.5 | **13** | 5.5 | 15.5 | 21 |
| 6 | 5.5 | 16.5 | 22 | **14** | 5.5 | 16 | 21.5 |
| 7 | 5.5 | 16.25 | 21.75 | **15** | 5.5 | 16.5 | 22 |
| 8 | 5.5 | 16 | 21.5 |  |  |  |  |

Table :Volume of wastewater (L) released for each of the 51 wash performed with the 5 red cotton donor garments

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Wash Number | Wash (L) | Rinse (L) | Total (L) | Wash Number | Wash (L) | Rinse (L) | Total (L) |
| 1 | 5.5 | 14.5 | 1 | 27 | 5 | 18 | 27 |
| 2 | 5.5 | 14 | 2 | 28 | 5.5 | 15.5 | 28 |
| 3 | 5 | 16.5 | 3 | 29 | 6 | 20 | 29 |
| 4 | 5 | 17 | 4 | 30 | 5.5 | 19 | 30 |
| 5 | 5.5 | 17 | 5 | 31 | 7.5 | 17 | 31 |
| 6 | 5.5 | 15.5 | 6 | 32 | 7.5 | 19.5 | 32 |
| 7 | 5.5 | 18 | 7 | 34 | 7.5 | 17 | 34 |
| 8 | 5.5 | 16 | 8 | 33 | 6.5 | 18.5 | 33 |
| 9 | 5.5 | 17 | 9 | 35 | 5 | 20 | 35 |
| 10 | 6 | 18 | 10 | 36 | 5 | 16 | 36 |
| 11 | 5.5 | 15.5 | 11 | 37 | 5 | 15 | 37 |
| 12 | 6 | 17 | 12 | 38 | 6 | 18 | 38 |
| 13 | 8 | 14.5 | 13 | 39 | 6.5 | 18.5 | 39 |
| 14 | 7.5 | 19.5 | 14 | 40 | 6.5 | 17.5 | 40 |
| 15 | 8 | 18.5 | 15 | 41 | 6.5 | 19 | 41 |
| 16 | 5 | 19.5 | 16 | 42 | 6.5 | 19.8 | 42 |
| 17 | 6 | 19 | 17 | 43 | 7 | 17 | 43 |
| 18 | 5.5 | 16.5 | 18 | 44 | 5.5 | 19.5 | 44 |
| 19 | 6 | 20.5 | 19 | 45 | 5.5 | 19.5 | 45 |
| 20 | 6.5 | 18.5 | 20 | 46 | 6 | 18.5 | 46 |
| 21 | 5.5 | 18.8 | 21 | 47 | 6 | 18 | 47 |
| 22 | 6 | 18 | 22 | 48 | 6 | 18.5 | 48 |
| 23 | 5.5 | 20.5 | 23 | 49 | 7 | 18.5 | 49 |
| 24 | 5.5 | 20 | 24 | 50 | 6.5 | 19 | 50 |
| 25 | 5 | 19 | 25 | 51 | 6.5 | 18.5 | 51 |
| 26 | 6 | 18.5 | 26 |  |  |  |  |

Table : Volume of wastewater (L) released for each of the 41 wash performed with the 12 red cotton donor garments.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Wash Number | Wash (L) | Rinse (L) | Total (L) | Wash Number | Wash (L) | Rinse (L) | Total (L) |
| 1 | 5.5 | 18 | 23.5 | **22** | 5.5 | 19.5 | 25 |
| 2 | 5.5 | 18 | 23.5 | **23** | 5.5 | 18 | 23.5 |
| 3 | 5.5 | 19 | 24.5 | **24** | 5.5 | 19 | 24.5 |
| 4 | 5.5 | 18 | 23.5 | **25** | 5.5 | 16 | 21.5 |
| 5 | 5.5 | 17.5 | 23 | **26** | 5.5 | 18 | 23.5 |
| 6 | 5.5 | 18 | 23.5 | **27** | 5.5 | 17 | 22.5 |
| 7 | 5.5 | 19 | 24.5 | **28** | 5.5 | 19 | 24.5 |
| 8 | 5.5 | 19 | 24.5 | **29** | 5.5 | 20.5 | 26 |
| 9 | 5.5 | 17.5 | 23 | **30** | 5.5 | 19 | 24.5 |
| 10 | 5.5 | 17 | 22.5 | **31** | 5.5 | 16.5 | 22 |
| 11 | 5.5 | 16.5 | 22 | **32** | 5.5 | 18.5 | 24 |
| 12 | 5.5 | 16 | 21.5 | **33** | 5.5 | 12 | 17.5 |
| 13 | 5.5 | 17.5 | 23 | **34** | 5.5 | 17 | 22.5 |
| 14 | 5.5 | 18 | 23.5 | **35** | 5.5 | 18.5 | 24 |
| 15 | 5.5 | 18 | 23.5 | **36** | 5.5 | 20 | 25.5 |
| 16 | 5.5 | 19 | 24.5 | **37** | 5.5 | 18 | 23.5 |
| 17 | 5.5 | 15.5 | 21 | **38** | 5.5 | 19 | 24.5 |
| 18 | 5.5 | 17 | 22.5 | **39** | 5.5 | 18.5 | 24 |
| 19 | 5.5 | 17.5 | 23 | **40** | 5.5 | 19 | 24.5 |
| 20 | 5.5 | 17.5 | 23 | **41** | 5.5 | 20 | 25.5 |
| 21 | 5.5 | 17.5 | 23 |  |  |  |  |

Raw data – Fibres released in the wastewater; 1 garment washed alone.

Table : Part I - Mass of fibres (recorded in mg) released

in each of the 15 wash cycles performed with 1 donor garments. FA: filter before filtration (reference data always presented first), FN: filter after filtration (reference data always presented first), Ndata: measurement type – reference, Sdata: measurement type – Sample, Date: expressed as year/month/day.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Filter | Date | Wash | Type | Mass1 | Mass2 | Mass3 | Mass4 | Mass5 |
| FA | 20230626 | 1 | Ndata | 1360.6 | 1360.5 | 1360.4 | 1360.5 | 1360.4 |
| FN | 20230626 | 1 | Ndata | 1360.6 | 1360.5 | 1360.6 | 1360.6 | 1360.6 |
| FA | 20230626 | 1 | Ndata | 1356.5 | 1356.4 | 1356.3 | 1356.5 | 1356.4 |
| FN | 20230626 | 1 | Sample | 1416.2 | 1416.1 | 1416.1 | 1416.2 | 1416.2 |
| FA | 20230627 | 2 | Ndata | 1360.6 | 1360.5 | 1360.6 | 1360.6 | 1360.6 |
| FN | 20230627 | 2 | Ndata | 1360.2 | 1360.5 | 1360.5 | 1360.4 | 1360.5 |
| FA | 20230627 | 2 | Ndata | 1354.3 | 1354.2 | 1354.2 | 1354.1 | 1354.3 |
| FN | 20230627 | 2 | Sample | 1426.7 | 1426.7 | 1426.9 | 1426.8 | 1426.8 |
| FA | 20230628 | 3 | Ndata | 1360.2 | 1360.5 | 1360.5 | 1360.4 | 1360.5 |
| FN | 20230628 | 3 | Ndata | 1360.6 | 1360.5 | 1360.7 | 1360.6 | 1360.6 |
| FA | 20230628 | 3 | Ndata | 1354.5 | 1354.5 | 1354.6 | 1354.5 | 1354.6 |
| FN | 20230628 | 3 | Sample | 1412.5 | 1412.4 | 1412.5 | 1412.5 | 1412.4 |
| FA | 20230629 | 4 | Ndata | 1360.6 | 1360.5 | 1360.7 | 1360.6 | 1360.6 |
| FN | 20230629 | 4 | Ndata | 1360.6 | 1360.4 | 1360.5 | 1360.5 | 1360.6 |
| FA | 20230629 | 4 | Ndata | 1355.2 | 1355.1 | 1355.1 | 1355.2 | 1355.3 |
| FN | 20230629 | 4 | Sample | 1412.4 | 1412.2 | 1412.3 | 1412.3 | 1412.3 |
| FA | 20230630 | 5 | Ndata | 1360.6 | 1360.4 | 1360.5 | 1360.5 | 1360.6 |
| FN | 20230630 | 5 | Ndata | 1360.4 | 1360.5 | 1360.4 | 1360.4 | 1360.5 |
| FA | 20230630 | 5 | Ndata | 1353 | 1353.1 | 1353 | 1353.1 | 1353.2 |
| FN | 20230630 | 5 | Sample | 1410.3 | 1410.2 | 1410.3 | 1410.3 | 1410.1 |
| FA | 20230703 | 6 | Ndata | 1360.4 | 1360.5 | 1360.4 | 1360.4 | 1360.5 |
| FN | 20230703 | 6 | Ndata | 1360.7 | 1360.7 | 1360.8 | 1360.8 | 1360.7 |
| FA | 20230703 | 6 | Ndata | 1358.1 | 1358 | 1358.1 | 1358 | 1358 |
| FN | 20230703 | 6 | Sample | 1419 | 1418.9 | 1419 | 1418.8 | 1419 |
| FA | 20230704 | 7 | Ndata | 1360.7 | 1360.7 | 1360.8 | 1360.8 | 1360.7 |
| FN | 20230704 | 7 | Ndata | 1360.7 | 1360.5 | 1360.5 | 1360.6 | 1360.7 |
| FA | 20230704 | 7 | Ndata | 1352.3 | 1352.1 | 1352.2 | 1352.2 | 1352.1 |
| FN | 20230704 | 7 | Sample | 1405.1 | 1405.2 | 1405 | 1405 | 1405.2 |

Table : Part II - Mass of fibres (recorded in mg) released

in each of the 15 wash cycles performed with 1 donor garments. FA: filter before filtration (reference data always presented first), FN: filter after filtration (reference data always presented first), Ndata: measurement type – reference, Sdata: measurement type – Sample, Date: expressed as year/month/day.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Filter | Date | Wash | Type | Mass1 | Mass2 | Mass3 | Mass4 | Mass5 |
| FA | 20230705 | 8 | Ndata | 1360.7 | 1360.7 | 1360.7 | 1360.6 | 1360.7 |
| FN | 20230705 | 8 | Ndata | 1360.6 | 1360.6 | 1360.6 | 1360.7 | 1360.6 |
| FA | 20230705 | 8 | Ndata | 1352.3 | 1352.2 | 1352.3 | 1352.3 | 1352.2 |
| FN | 20230705 | 8 | Sample | 1397.9 | 1397.8 | 1397.9 | 1397.9 | 1397.9 |
| FA | 20230707 | 9 | Ndata | 1350.8 | 1350.8 | 1350.7 | 1350.8 | 1350.8 |
| FN | 20230707 | 9 | Ndata | 1360.7 | 1360.6 | 1360.6 | 1360.7 | 1360.6 |
| FA | 20230707 | 9 | Ndata | 1360.2 | 1360.3 | 1360.3 | 1360.2 | 1360.3 |
| FN | 20230707 | 9 | Sample | 1395.2 | 1395.1 | 1395.2 | 1395.1 | 1395.1 |
| FA | 20230710 | 10 | Ndata | 1360.7 | 1360.7 | 1360.8 | 1360.7 | 1360.7 |
| FN | 20230710 | 10 | Ndata | 1360.6 | 1360.6 | 1360.5 | 1360.6 | 1360.6 |
| FA | 20230710 | 10 | Ndata | 1349.1 | 1349.1 | 1349.1 | 1349 | 1349.1 |
| FN | 20230710 | 10 | Sample | 1393.6 | 1393.6 | 1393.7 | 1393.7 | 1393.6 |
| FA | 20230711 | 11 | Ndata | 1360.6 | 1360.6 | 1360.5 | 1360.6 | 1360.6 |
| FN | 20230711 | 11 | Ndata | 1360.5 | 1360.5 | 1360.6 | 1360.5 | 1360.5 |
| FA | 20230711 | 11 | Ndata | 1349.9 | 1349.8 | 1350.1 | 1350 | 1349.9 |
| FN | 20230711 | 11 | Sample | 1390.5 | 1390.5 | 1390.5 | 1390.4 | 1390.5 |
| FA | 20230712 | 12 | Ndata | 1360.7 | 1360.7 | 1360.8 | 1360.8 | 1360.8 |
| FN | 20230712 | 12 | Ndata | 1360.6 | 1360.5 | 1360.6 | 1360.6 | 1360.5 |
| FA | 20230712 | 12 | Ndata | 1345.1 | 1345.2 | 1345.1 | 1345.2 | 1345.2 |
| FN | 20230712 | 12 | Sample | 1384.8 | 1384.7 | 1384.8 | 1384.7 | 1384.7 |
| FA | 20230713 | 13 | Ndata | 1360.7 | 1360.7 | 1360.6 | 1360.7 | 1360.7 |
| FN | 20230713 | 13 | Ndata | 1360.4 | 1360.4 | 1360.4 | 1360.5 | 1360.4 |
| FA | 20230713 | 13 | Ndata | 1344.5 | 1344.6 | 1344.4 | 1344.6 | 1344.5 |
| FN | 20230713 | 13 | Sample | 1381.8 | 1381.8 | 1381.7 | 1381.7 | 1381.7 |
| FA | 20230714 | 14 | Ndata | 1360.7 | 1360.7 | 1360.7 | 1360.6 | 1360.7 |
| FN | 20230714 | 14 | Ndata | 1360.6 | 1360.6 | 1360.6 | 1360.6 | 1360.7 |
| FA | 20230714 | 14 | Ndata | 1344.5 | 1344.4 | 1344.4 | 1344.3 | 1344.5 |
| FN | 20230714 | 14 | Sample | 1374.2 | 1374.2 | 1374.3 | 1374.2 | 1374.3 |
| FA | 20230717 | 15 | Ndata | 1360.8 | 1360.9 | 1360.8 | 1360.8 | 1360.9 |
| FN | 20230717 | 15 | Ndata | 1360.7 | 1360.7 | 1360.7 | 1360.7 | 1360.7 |
| FA | 20230717 | 15 | Ndata | 1341 | 1341.1 | 1340.9 | 1340.8 | 1340.8 |
| FN | 20230717 | 15 | Sample | 1365.4 | 1365.3 | 1365.4 | 1365.4 | 1365.3 |

Raw data – Fibres released in the wastewater; 5 garments washed together

Table : Part I - Mass of fibres (recorded in mg) released

in each of the 51 wash cycles performed with the 5 donor garments. FA: filter before filtration (reference data always presented first), FN: filter after filtration (reference data always presented first), Ndata: measurement type – reference, Sdata: measurement type – Sample, Date: expressed as year/month/day.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Filter | Date | Wash | Type | Mass1 | Mass2 | Mass3 | Mass4 | Mass5 |
| FA | 20210517 | 1 | Ndata | 1360.1 | 1360.2 | 1360.2 | 1360.3 | 1360.1 |
| FN | 20210517 | 1 | Ndata | 1360.3 | 1360.2 | 1360.3 | 1360.2 | 1360.4 |
| FA | 20210517 | 1 | Ndata | 1361.0 | 1361.2 | 1361.2 | 1361.1 | 1361.0 |
| FN | 20210517 | 1 | Sdata | 1428.1 | 1428.2 | 1428.1 | 1428.1 | 1428.0 |
| FA | 20210519 | 2 | Ndata | 1360.6 | 1360.5 | 1360.6 | 1360.5 | 1360.4 |
| FN | 20210519 | 2 | Ndata | 1360.4 | 1360.4 | 1360.5 | 1360.4 | 1360.3 |
| FA | 20210519 | 2 | Ndata | 1361.6 | 1361.5 | 1361.6 | 1361.5 | 1361.5 |
| FN | 20210519 | 2 | Sdata | 1464.7 | 1464.6 | 1464.5 | 1464.6 | 1464.7 |
| FA | 20210524 | 3 | Ndata | 1360.5 | 1360.6 | 1360.5 | 1360.6 | 1360.6 |
| FN | 20210524 | 3 | Ndata | 1360.4 | 1360.5 | 1360.4 | 1360.3 | 1360.4 |
| FA | 20210524 | 3 | Ndata | 1361.9 | 1361.8 | 1361.9 | 1361.9 | 1361.8 |
| FN | 20210524 | 3 | Sdata | 1447.7 | 1447.8 | 1447.7 | 1447.7 | 1447.8 |
| FA | 20210526 | 4 | Ndata | 1360.3 | 1360.4 | 1360.4 | 1360.3 | 1360.5 |
| FN | 20210526 | 4 | Ndata | 1360.5 | 1360.4 | 1360.5 | 1360.5 | 1360.4 |
| FA | 20210526 | 4 | Ndata | 1361.7 | 1361.6 | 1361.5 | 1361.6 | 1361.6 |
| FN | 20210526 | 4 | Sdata | 1492.9 | 1493.0 | 1492.9 | 1493.0 | 1493.0 |
| FA | 20210531 | 5 | Ndata | 1360.4 | 1360.3 | 1360.3 | 1360.4 | 1360.3 |
| FN | 20210531 | 5 | Ndata | 1360.2 | 1360.4 | 1360.3 | 1360.3 | 1360.4 |
| FA | 20210531 | 5 | Ndata | 1362.3 | 1362.2 | 1362.3 | 1362.3 | 1362.2 |
| FN | 20210531 | 5 | Sdata | 1483.8 | 1483.9 | 1483.8 | 1483.9 | 1483.9 |
| FA | 20210607 | 6 | Ndata | 1360.3 | 1360.4 | 1360.3 | 1360.5 | 1360.4 |
| FN | 20210607 | 6 | Ndata | 1360.4 | 1360.4 | 1360.4 | 1360.3 | 1360.3 |
| FA | 20210607 | 6 | Ndata | 1361.9 | 1362.0 | 1362.0 | 1361.9 | 1361.8 |
| FN | 20210607 | 6 | Sdata | 1486.4 | 1486.5 | 1486.5 | 1486.5 | 1486.3 |
| FA | 20210609 | 7 | Ndata | 1360.6 | 1360.5 | 1360.6 | 1360.6 | 1360.4 |
| FN | 20210609 | 7 | Ndata | 1360.6 | 1360.5 | 1360.6 | 1360.6 | 1360.6 |
| FA | 20210609 | 7 | Ndata | 1361.2 | 1361.3 | 1361.2 | 1361.2 | 1361.1 |
| FN | 20210609 | 7 | Sdata | 1469.9 | 1470.0 | 1469.8 | 1469.8 | 1469.9 |

Table : Part II - Mass of fibres (recorded in mg) released

in each of the 51 wash cycles performed with the 5 donor garments. FA: filter before filtration (reference data always presented first), FN: filter after filtration (reference data always presented first), Ndata: measurement type – reference, Sdata: measurement type – Sample, Date: expressed as year/month/day.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Filter | Date | Wash | Type | Mass1 | Mass2 | Mass3 | Mass4 | Mass5 |
| FA | 20220610 | 8 | Ndata | 1360.6 | 1360.5 | 1360.6 | 1360.6 | 1360.4 |
| FN | 20220610 | 8 | Ndata | 1360.6 | 1360.5 | 1360.6 | 1360.6 | 1360.7 |
| FA | 20220610 | 8 | Ndata | 1361.9 | 1362.0 | 1362.0 | 1361.9 | 1361.9 |
| FN | 20220610 | 8 | Sdata | 1468.0 | 1468.0 | 1468.1 | 1468.0 | 1467.9 |
| FA | 20210614 | 9 | Ndata | 1360.6 | 1360.5 | 1360.6 | 1360.6 | 1360.7 |
| FN | 20210614 | 9 | Ndata | 1360.5 | 1360.5 | 1360.4 | 1360.4 | 1360.5 |
| FA | 20210614 | 9 | Ndata | 1361.8 | 1361.7 | 1361.8 | 1361.8 | 1361.9 |
| FN | 20210614 | 9 | Sdata | 1466.8 | 1466.8 | 1466.9 | 1466.9 | 1466.8 |
| FA | 20210615 | 10 | Ndata | 1360.5 | 1360.5 | 1360.4 | 1360.4 | 1360.5 |
| FN | 20210615 | 10 | Ndata | 1360.4 | 1360.5 | 1360.5 | 1360.5 | 1360.4 |
| FA | 20210615 | 10 | Ndata | 1361.0 | 1361.0 | 1361.1 | 1361.1 | 1360.9 |
| FN | 20210615 | 10 | Sdata | 1490.2 | 1490.1 | 1490.1 | 1490.1 | 1490.2 |
| FA | 20210616 | 11 | Ndata | 1360.5 | 1360.6 | 1360.5 | 1360.6 | 1360.5 |
| FN | 20210616 | 11 | Ndata | 1360.4 | 1360.5 | 1360.5 | 1360.5 | 1360.4 |
| FA | 20210616 | 11 | Ndata | 1361.8 | 1361.8 | 1361.7 | 1361.8 | 1361.8 |
| FN | 20210616 | 11 | Sdata | 1489.7 | 1489.6 | 1489.6 | 1489.6 | 1489.7 |
| FA | 20210617 | 12 | Ndata | 1360.4 | 1360.5 | 1360.5 | 1360.5 | 1360.4 |
| FN | 20210617 | 12 | Ndata | 1360.6 | 1360.5 | 1360.4 | 1360.4 | 1360.5 |
| FA | 20210617 | 12 | Ndata | 1361.9 | 1362.0 | 1362.0 | 1361.9 | 1362.0 |
| FN | 20210617 | 12 | Sdata | 1488.1 | 1488.0 | 1488.0 | 1488.0 | 1488.1 |
| FA | 20210622 | 13 | Ndata | 1360.0 | 1360.1 | 1360.1 | 1360.0 | 1360.2 |
| FN | 20210622 | 13 | Ndata | 1360.5 | 1360.5 | 1360.4 | 1360.5 | 1360.5 |
| FA | 20210622 | 13 | Ndata | 1360.6 | 1360.6 | 1360.7 | 1360.6 | 1360.6 |
| FN | 20210622 | 13 | Sdata | 1495.0 | 1495.0 | 1494.9 | 1495.1 | 1495.1 |
| FA | 20210628 | 14 | Ndata | 1360.5 | 1360.5 | 1360.4 | 1360.5 | 1360.5 |
| FN | 20210628 | 14 | Ndata | 1360.3 | 1360.4 | 1360.3 | 1360.3 | 1360.5 |
| FA | 20210628 | 14 | Ndata | 1361.2 | 1361.1 | 1361.0 | 1361.0 | 1361.0 |
| FN | 20210628 | 14 | Sdata | 1492.1 | 1492.2 | 1492.2 | 1492.0 | 1492.1 |

Table : Part III - Mass of fibres (recorded in mg) released

in each of the 51 wash cycles performed with the 5 donor garments. FA: filter before filtration (reference data always presented first), FN: filter after filtration (reference data always presented first), Ndata: measurement type – reference, Sdata: measurement type – Sample, Date: expressed as year/month/day.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Filter | Date | Wash | Type | Mass1 | Mass2 | Mass3 | Mass4 | Mass5 |
| FA | 20210629 | 15 | Ndata | 1360.3 | 1360.4 | 1360.3 | 1360.3 | 1360.5 |
| FN | 20210629 | 15 | Ndata | 1360.6 | 1360.7 | 1360.6 | 1360.5 | 1360.6 |
| FA | 20210629 | 15 | Ndata | 1361.6 | 1361.6 | 1361.6 | 1361.5 | 1361.6 |
| FN | 20210629 | 15 | Sdata | 1515.3 | 1515.4 | 1515.4 | 1515.3 | 1515.4 |
| FA | 20210630 | 16 | Ndata | 1360.6 | 1360.7 | 1360.6 | 1360.5 | 1360.6 |
| FN | 20210630 | 16 | Ndata | 1360.2 | 1360.1 | 1360.2 | 1360.2 | 1360.3 |
| FA | 20210630 | 16 | Ndata | 1360.9 | 1361.0 | 1361.1 | 1361.1 | 1361.0 |
| FN | 20210630 | 16 | Sdata | 1466.9 | 1466.8 | 1466.8 | 1467.0 | 1466.9 |
| FA | 20210701 | 17 | Ndata | 1360.4 | 1360.4 | 1360.4 | 1360.5 | 1360.3 |
| FN | 20210701 | 17 | Ndata | 1360.5 | 1360.5 | 1360.4 | 1360.3 | 1360.3 |
| FA | 20210701 | 17 | Ndata | 1361.7 | 1361.6 | 1361.6 | 1361.7 | 1361.6 |
| FN | 20210701 | 17 | Sdata | 1488.7 | 1488.8 | 1488.7 | 1488.7 | 1488.8 |
| FA | 20210705 | 18 | Ndata | 1360.4 | 1360.4 | 1360.4 | 1360.5 | 1360.3 |
| FN | 20210705 | 18 | Ndata | 1360.7 | 1360.7 | 1360.8 | 1360.6 | 1360.6 |
| FA | 20210705 | 18 | Ndata | 1360.8 | 1360.7 | 1360.8 | 1360.8 | 1360.8 |
| FN | 20210705 | 18 | Sdata | 1447.9 | 1447.8 | 1448.0 | 1447.9 | 1447.9 |
| FA | 20210706 | 19 | Ndata | 1360.7 | 1360.7 | 1360.8 | 1360.6 | 1360.6 |
| FN | 20210706 | 19 | Ndata | 1360.4 | 1360.4 | 1360.5 | 1360.5 | 1360.4 |
| FA | 20210706 | 19 | Ndata | 1361.5 | 1361.4 | 1361.5 | 1360.3 | 1361.5 |
| FN | 20210706 | 19 | Sdata | 1479.6 | 1479.6 | 1479.5 | 1479.6 | 1479.7 |
| FA | 20210707 | 20 | Ndata | 1360.6 | 1360.7 | 1360.6 | 1360.6 | 1360.5 |
| FN | 20210707 | 20 | Ndata | 1360.6 | 1360.7 | 1360.6 | 1360.6 | 1360.7 |
| FA | 20210707 | 20 | Ndata | 1361.5 | 1361.6 | 1361.5 | 1361.6 | 1361.7 |
| FN | 20210707 | 20 | Sdata | 1473.1 | 1473.2 | 1473.1 | 1473.1 | 1473.3 |
| FA | 20210719 | 21 | Ndata | 1360.4 | 1360.5 | 1360.5 | 1360.5 | 1360.4 |
| FN | 20210719 | 21 | Ndata | 1360.4 | 1360.3 | 1360.4 | 1360.5 | 1360.5 |
| FA | 20210719 | 21 | Ndata | 1361.8 | 1361.7 | 1361.6 | 1361.7 | 1361.7 |
| FN | 20210719 | 21 | Sdata | 1488.2 | 1488.1 | 1488.2 | 1488.3 | 1488.2 |

Table : Part IV - Mass of fibres (recorded in mg) released

in each of the 51 wash cycles performed with the 5 donor garments. FA: filter before filtration (reference data always presented first), FN: filter after filtration (reference data always presented first), Ndata: measurement type – reference, Sdata: measurement type – Sample, Date: expressed as year/month/day.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Filter | Date | Wash | Type | Mass1 | Mass2 | Mass3 | Mass4 | Mass5 |
| FA | 20210720 | 22 | Ndata | 1360.4 | 1360.5 | 1360.4 | 1360.5 | 1360.5 |
| FN | 20210720 | 22 | Ndata | 1360.7 | 1360.6 | 1360.6 | 1360.5 | 1360.5 |
| FA | 20210720 | 22 | Ndata | 1360.9 | 1360.1 | 1360.9 | 1360.9 | 1361 |
| FN | 20210720 | 22 | Sdata | 1471.1 | 1471 | 1470.9 | 1470.9 | 1471.1 |
| FA | 20210721 | 23 | Ndata | 1360.7 | 1360.6 | 1360.6 | 1360.5 | 1360.5 |
| FN | 20210721 | 23 | Ndata | 1360.4 | 1360.3 | 1360.4 | 1360.5 | 1360.5 |
| FA | 20210721 | 23 | Ndata | 1361.9 | 1361.9 | 1361.9 | 1361.8 | 1361.9 |
| FN | 20210721 | 23 | Sdata | 1468.6 | 1468.5 | 1468.4 | 1468.6 | 1468.6 |
| FA | 20210726 | 24 | Ndata | 1360.5 | 1360.4 | 1360.4 | 1360.5 | 1360.4 |
| FN | 20210726 | 24 | Ndata | 1360.5 | 1360.4 | 1360.4 | 1360.5 | 1360.5 |
| FA | 20210726 | 24 | Ndata | 1360.2 | 1360.1 | 1360.2 | 1360 | 1360.1 |
| FN | 20210726 | 24 | Sdata | 1459.5 | 1459.6 | 1459.6 | 1459.4 | 1459.5 |
| FA | 20210727 | 25 | Ndata | 1360.5 | 1360.4 | 1360.4 | 1360.5 | 1360.5 |
| FN | 20210727 | 25 | Ndata | 1360.7 | 1360.8 | 1360.6 | 1360.7 | 1360.7 |
| FA | 20210727 | 25 | Ndata | 1361.3 | 1361.3 | 1361.2 | 1361.2 | 1361.3 |
| FN | 20210727 | 25 | Sdata | 1460.7 | 1460.8 | 1460.7 | 1460.6 | 1460.6 |
| FA | 20210728 | 26 | Ndata | 1360.7 | 1360.8 | 1360.6 | 1360.7 | 1360.7 |
| FN | 20210728 | 26 | Ndata | 1360.5 | 1360.5 | 1360.4 | 1360.5 | 1360.5 |
| FA | 20210728 | 26 | Ndata | 1360.7 | 1361.6 | 1361.6 | 1361.7 | 1361.5 |
| FN | 20210728 | 26 | Sdata | 1457.3 | 1457.2 | 1457.3 | 1457.3 | 1457.1 |
| FA | 20210729 | 27 | Ndata | 1360.5 | 1360.5 | 1360.4 | 1360.5 | 1360.5 |
| FN | 20210729 | 27 | Ndata | 1360.6 | 1360.5 | 1360.7 | 1360.6 | 1360.5 |
| FA | 20210729 | 27 | Ndata | 1361.9 | 1361.8 | 1361.8 | 1361.7 | 1361.9 |
| FN | 20210729 | 27 | Sdata | 1474 | 1474.1 | 1474.1 | 1474.1 | 1473.9 |
| FA | 20210803 | 28 | Ndata | 1360.6 | 1360.5 | 1360.7 | 1360.6 | 1360.5 |
| FN | 20210803 | 28 | Ndata | 1360.2 | 1360.3 | 1360.4 | 1360.3 | 1360.4 |
| FA | 20210803 | 28 | Ndata | 1362 | 1361.9 | 1361.9 | 1362 | 1362.1 |
| FN | 20210803 | 28 | Sdata | 1473.5 | 1473.4 | 1473.4 | 1473.5 | 1473.4 |

Table : Part V - Mass of fibres (recorded in mg) released

in each of the 51 wash cycles performed with the 5 donor garments. FA: filter before filtration (reference data always presented first), FN: filter after filtration (reference data always presented first), Ndata: measurement type – reference, Sdata: measurement type – Sample, Date: expressed as year/month/day.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Filter | Date | Wash | Type | Mass1 | Mass2 | Mass3 | Mass4 | Mass5 |
| FA | 20210805 | 29 | Ndata | 1360.2 | 1360.3 | 1360.4 | 1360.3 | 1360.4 |
| FN | 20210805 | 29 | Ndata | 1360.5 | 1360.4 | 1360.5 | 1360.5 | 1360.4 |
| FA | 20210805 | 29 | Ndata | 1360.9 | 1361.1 | 1361.1 | 1361 | 1361.1 |
| FN | 20210805 | 29 | Sdata | 1475.8 | 1475.7 | 1475.6 | 1475.7 | 1475.8 |
| FA | 20210309 | 30 | Ndata | 1360.5 | 1360.4 | 1360.5 | 1360.5 | 1360.4 |
| FN | 20210309 | 30 | Ndata | 1360.4 | 1360.5 | 1360.4 | 1360.4 | 1360.5 |
| FA | 20210309 | 30 | Ndata | 1360.7 | 1360.8 | 1360.7 | 1360.6 | 1360.7 |
| FN | 20210309 | 30 | Sdata | 1469.1 | 1469.2 | 1469.2 | 1469.1 | 1469.1 |
| FA | 20210817 | 31 | Ndata | 1360.4 | 1360.5 | 1360.4 | 1360.4 | 1360.5 |
| FN | 20210817 | 31 | Ndata | 1360.5 | 1360.4 | 1360.6 | 1360.5 | 1360.4 |
| FA | 20210817 | 31 | Ndata | 1361.2 | 1361.1 | 1361 | 1361.1 | 1361.2 |
| FN | 20210817 | 31 | Sdata | 1466.8 | 1466.9 | 1466.8 | 1466.7 | 1466.7 |
| FA | 20210901 | 32 | Ndata | 1360.5 | 1360.4 | 1360.6 | 1360.5 | 1360.4 |
| FN | 20210901 | 32 | Ndata | 1360.6 | 1360.6 | 1360.6 | 1360.5 | 1360.4 |
| FA | 20210901 | 32 | Ndata | 1361.6 | 1361.6 | 1361.6 | 1361.6 | 1361.5 |
| FN | 20210901 | 32 | Sdata | 1479.5 | 1479.6 | 1479.4 | 1479.5 | 1479.5 |
| FA | 20210902 | 33 | Ndata | 1360.6 | 1360.6 | 1360.6 | 1360.5 | 1360.4 |
| FN | 20210902 | 33 | Ndata | 1360.5 | 1360.4 | 1360.6 | 1360.6 | 1360.5 |
| FA | 20210902 | 33 | Ndata | 1361.7 | 1361.8 | 1361.6 | 1361.7 | 1361.8 |
| FN | 20210902 | 33 | Sdata | 1480.3 | 1480.3 | 1480.3 | 1480.2 | 1480.3 |
| FA | 20210908 | 35 | Ndata | 1360.5 | 1360.4 | 1360.5 | 1360.4 | 1360.4 |
| FN | 20210908 | 35 | Ndata | 1360.4 | 1360.5 | 1360.3 | 1360.3 | 1360.4 |
| FA | 20210908 | 35 | Ndata | 1360.8 | 1360.7 | 1360.7 | 1360.6 | 1360.7 |
| FN | 20210908 | 35 | Sdata | 1458.2 | 1458.1 | 1458.1 | 1458 | 1458.1 |
| FA | 20210928 | 36 | Ndata | 1360.4 | 1360.5 | 1360.3 | 1360.3 | 1360.4 |
| FN | 20210928 | 36 | Ndata | 1360.7 | 1360.6 | 1360.6 | 1360.5 | 1360.7 |
| FA | 20210928 | 36 | Ndata | 1360.9 | 1360.8 | 1360.9 | 1360.9 | 1360.9 |
| FN | 20210928 | 36 | Sdata | 1440.8 | 1440.7 | 1440.8 | 1440.8 | 1440.7 |

Table : Part VI - Mass of fibres (recorded in mg) released

in each of the 51 wash cycles performed with the 5 donor garments. FA: filter before filtration (reference data always presented first), FN: filter after filtration (reference data always presented first), Ndata: measurement type – reference, Sdata: measurement type – Sample, Date: expressed as year/month/day.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Filter | Date | Wash | Type | Mass1 | Mass2 | Mass3 | Mass4 | Mass5 |
| FA | 20210929 | 37 | Ndata | 1360.7 | 1360.6 | 1360.6 | 1360.5 | 1360.7 |
| FN | 20210929 | 37 | Ndata | 1360.6 | 1360.5 | 1360.4 | 1360.5 | 1360.5 |
| FA | 20210929 | 37 | Ndata | 1361.7 | 1361.6 | 1361.7 | 1361.7 | 1361.6 |
| FN | 20210929 | 37 | Sdata | 1449.6 | 1449.7 | 1449.6 | 1449.6 | 1449.7 |
| FA | 20210930 | 38 | Ndata | 1360.6 | 1360.5 | 1360.4 | 1360.5 | 1360.5 |
| FN | 20210930 | 38 | Ndata | 1360.4 | 1360.5 | 1360.4 | 1360.4 | 1360.4 |
| FA | 20210930 | 38 | Ndata | 1361.6 | 1361.6 | 1361.5 | 1361.6 | 1361.5 |
| FN | 20210930 | 38 | Sdata | 1463.7 | 1463.6 | 1463.7 | 1463.5 | 1463.6 |
| FA | 20211004 | 39 | Ndata | 1360.4 | 1360.5 | 1360.4 | 1360.4 | 1360.4 |
| FN | 20211004 | 39 | Ndata | 1360.6 | 1360.6 | 1360.7 | 1360.6 | 1360.6 |
| FA | 20211004 | 39 | Ndata | 1361.3 | 1361.2 | 1361.3 | 1361.1 | 1361.1 |
| FN | 20211004 | 39 | Sdata | 1471.4 | 1471.3 | 1471.3 | 1471.4 | 1471.1 |
| FA | 20211005 | 40 | Ndata | 1360.6 | 1360.6 | 1360.7 | 1360.6 | 1360.6 |
| FN | 20211005 | 40 | Ndata | 1360.6 | 1360.5 | 1360.4 | 1360.5 | 1360.4 |
| FA | 20211005 | 40 | Ndata | 1362 | 1362.1 | 1362.2 | 1362.1 | 1362.1 |
| FN | 20211005 | 40 | Sdata | 1470.4 | 1470.3 | 1470.3 | 1470.4 | 1470.5 |
| FA | 20211006 | 41 | Ndata | 1360.6 | 1360.5 | 1360.4 | 1360.5 | 1360.4 |
| FN | 20211006 | 41 | Ndata | 1360.7 | 1360.6 | 1360.6 | 1360.7 | 1360.7 |
| FA | 20211006 | 41 | Ndata | 1360.5 | 1360.6 | 1360.7 | 1360.6 | 1360.5 |
| FN | 20211006 | 41 | Sdata | 1472.7 | 1472.8 | 1472.7 | 1472.6 | 1472.7 |
| FA | 20211007 | 42 | Ndata | 1360.7 | 1360.6 | 1360.6 | 1360.7 | 1360.7 |
| FN | 20211007 | 42 | Ndata | 1360.4 | 1360.4 | 1360.5 | 1360.4 | 1360.3 |
| FA | 20211007 | 42 | Ndata | 1360.9 | 1360.9 | 1361 | 1360.8 | 1360.9 |
| FN | 20211007 | 42 | Sdata | 1470.3 | 1470.4 | 1470.3 | 1470.3 | 1470.5 |
| FA | 20211014 | 43 | Ndata | 1360.4 | 1360.4 | 1360.5 | 1360.4 | 1360.3 |
| FN | 20211014 | 43 | Ndata | 1360.5 | 1360.5 | 1360.4 | 1360.3 | 1360.5 |
| FA | 20211014 | 43 | Ndata | 1360.4 | 1360.5 | 1360.3 | 1360.4 | 1360.4 |
| FN | 20211014 | 43 | Sdata | 1472.8 | 1472.9 | 1473 | 1472.9 | 1472.8 |

Table : Part VII - Mass of fibres (recorded in mg) released

in each of the 51 wash cycles performed with the 5 donor garments. FA: filter before filtration (reference data always presented first), FN: filter after filtration (reference data always presented first), Ndata: measurement type – reference, Sdata: measurement type – Sample, Date: expressed as year/month/day.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Filter | Date | Wash | Type | Mass1 | Mass2 | Mass3 | Mass4 | Mass5 |
| FA | 20211018 | 44 | Ndata | 1360.5 | 1360.5 | 1360.4 | 1360.3 | 1360.5 |
| FN | 20211018 | 44 | Ndata | 1360.3 | 1360.3 | 1360.2 | 1360.2 | 1360.1 |
| FA | 20211018 | 44 | Ndata | 1361.8 | 1361.9 | 1361.9 | 1362.9 | 1361.8 |
| FN | 20211018 | 44 | Sdata | 1476.4 | 1476.3 | 1476.5 | 1476.4 | 1476.3 |
| FA | 20210281 | 45 | Ndata | 1360.3 | 1360.3 | 1360.2 | 1360.2 | 1360.1 |
| FN | 20210281 | 45 | Ndata | 1360.3 | 1360.3 | 1360.2 | 1360.2 | 1360.1 |
| FA | 20210281 | 45 | Ndata | 1361.1 | 1361 | 1361.1 | 1361.2 | 1361.1 |
| FN | 20210281 | 45 | Sdata | 1476.4 | 1476.3 | 1476.4 | 1476.5 | 1476.3 |
| FA | 20211025 | 46 | Ndata | 1360.3 | 1360.3 | 1360.2 | 1360.2 | 1360.1 |
| FN | 20211025 | 46 | Ndata | 1360.5 | 1360.4 | 1360.5 | 1360.4 | 1360.3 |
| FA | 20211025 | 46 | Ndata | 1361.1 | 1361 | 1361.1 | 1361.2 | 1361.1 |
| FN | 20211025 | 46 | Sdata | 1468 | 1467.9 | 1467.9 | 1468 | 1468.1 |
| FA | 20211101 | 47 | Ndata | 1360.5 | 1360.4 | 1360.5 | 1360.4 | 1360.3 |
| FN | 20211101 | 47 | Ndata | 1360.5 | 1360.4 | 1360.5 | 1360.4 | 1360.4 |
| FA | 20211101 | 47 | Ndata | 1361.4 | 1361.4 | 1361.4 | 1361.3 | 1361.5 |
| FN | 20211101 | 47 | Sdata | 1461.6 | 1461.5 | 1461.6 | 1461.6 | 1461.5 |
| FA | 20211103 | 48 | Ndata | 1360.5 | 1360.4 | 1360.5 | 1360.4 | 1360.4 |
| FN | 20211103 | 48 | Ndata | 1360.4 | 1360.5 | 1360.6 | 1360.5 | 1360.5 |
| FA | 20211103 | 48 | Ndata | 1359.9 | 1360 | 1360 | 1359.9 | 1360.1 |
| FN | 20211103 | 48 | Sdata | 1480.7 | 1480.6 | 1480.6 | 1480.7 | 1480.6 |
| FA | 20211109 | 49 | Ndata | 1360.4 | 1360.5 | 1360.6 | 1360.5 | 1360.5 |
| FN | 20211109 | 49 | Ndata | 1360.6 | 1360.5 | 1360.4 | 1360.5 | 1360.4 |
| FA | 20211109 | 49 | Ndata | 1360.8 | 1360.7 | 1360.6 | 1360.7 | 1360.7 |
| FN | 20211109 | 49 | Sdata | 1464.5 | 1464.6 | 1464.6 | 1464.5 | 1464.4 |
| FA | 20211110 | 50 | Ndata | 1360.6 | 1360.5 | 1360.4 | 1360.5 | 1360.4 |
| FN | 20211110 | 50 | Ndata | 1360.4 | 1360.5 | 1360.5 | 1360.5 | 1360.6 |
| FA | 20211110 | 50 | Ndata | 1362.1 | 1362.2 | 1362.1 | 1362.2 | 1362.2 |
| FN | 20211110 | 50 | Sdata | 1465.1 | 1465.2 | 1465.1 | 1465 | 1465.2 |
| FN | 20211115 | 51 | Ndata | 1360.5 | 1360.6 | 1360.6 | 1360.5 | 1360.7 |
| FA | 20211115 | 51 | Ndata | 1362.2 | 1362.1 | 1362.2 | 1362.1 | 1362.1 |
| FN | 20211115 | 51 | Sdata | 1471.4 | 1471.5 | 1471.5 | 1471.6 | 1471.4 |

Raw data – Fibres released in the wastewater; 12 garments washed together.

Table : Part I - Mass of fibres (recorded in mg) released

in each of the 41 wash cycles performed with the 12 donor garments. FA: filter before filtration (reference data always presented first), FN: filter after filtration (reference data always presented first), Ndata: measurement type – reference, Sdata: measurement type – Sample, Date: expressed as year/month/day.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Filter | Date | Wash | Type | Mass1 | Mass2 | Mass3 | Mass4 | Mass5 |
| FA | 20230626 | 1 | Ndata | 1360.6 | 1360.5 | 1360.6 | 1360.6 | 1360.5 |
| FN | 20230626 | 1 | Ndata | 1360.6 | 1360.5 | 1360.6 | 1360.6 | 1360.6 |
| FA | 20230626 | 1 | Ndata | 1349.7 | 1349.6 | 1349.7 | 1349.7 | 1349.7 |
| FN | 20230626 | 1 | Sample | 1400.9 | 1400.9 | 1400.8 | 1400.9 | 1400.8 |
| FA | 20230627 | 2 | Ndata | 1360.8 | 1360.9 | 1360.9 | 1360.8 | 1360.9 |
| FN | 20230627 | 2 | Ndata | 1360.6 | 1360.6 | 1360.6 | 1360.6 | 1360.6 |
| FA | 20230627 | 2 | Ndata | 1344.3 | 1344.2 | 1344.2 | 1344.3 | 1344.3 |
| FN | 20230627 | 2 | Sample | 1402.4 | 1402.3 | 1402.3 | 1402.3 | 1402.3 |
| FA | 20230628 | 3 | Ndata | 1360.6 | 1360.6 | 1360.6 | 1360.6 | 1360.6 |
| FN | 20230628 | 3 | Ndata | 1360.7 | 1360.6 | 1360.6 | 1360.6 | 1360.6 |
| FA | 20230628 | 3 | Ndata | 1342.8 | 1342.8 | 1342.8 | 1342.8 | 1342.8 |
| FN | 20230628 | 3 | Sample | 1413.6 | 1413.6 | 1413.5 | 1413.6 | 1413.6 |
| FA | 20230629 | 4 | Ndata | 1360.6 | 1360.6 | 1360.6 | 1360.6 | 1360.6 |
| FN | 20230629 | 4 | Ndata | 1360.6 | 1360.6 | 1360.7 | 1360.6 | 1360.7 |
| FA | 20230629 | 4 | Ndata | 1347.4 | 1347.5 | 1347.4 | 1347.5 | 1347.4 |
| FN | 20230629 | 4 | Sample | 1426.9 | 1426.9 | 1426.8 | 1426.9 | 1426.9 |
| FA | 20230630 | 5 | Ndata | 1360.7 | 1360.6 | 1360.6 | 1360.7 | 1360.6 |
| FN | 20230630 | 5 | Ndata | 1360.5 | 1360.6 | 1360.6 | 1360.5 | 1360.6 |
| FA | 20230630 | 5 | Ndata | 1342.4 | 1342.4 | 1342.5 | 1342.4 | 1342.4 |
| FN | 20230630 | 5 | Sample | 1407.6 | 1407.7 | 1407.7 | 1407.6 | 1407.7 |
| FA | 20230703 | 6 | Ndata | 1360.5 | 1360.6 | 1360.6 | 1360.5 | 1360.6 |
| FN | 20230703 | 6 | Ndata | 1360.7 | 1360.7 | 1360.6 | 1360.7 | 1360.7 |
| FA | 20230703 | 6 | Ndata | 1341.3 | 1341.3 | 1341.2 | 1341.3 | 1341.3 |
| FN | 20230703 | 6 | Sample | 1414.3 | 1414.3 | 1414.4 | 1414.3 | 1414.3 |
| FA | 20230704 | 7 | Ndata | 1360.7 | 1360.7 | 1360.6 | 1360.7 | 1360.7 |
| FN | 20230704 | 7 | Ndata | 1360.4 | 1360.4 | 1360.4 | 1360.5 | 1360.4 |
| FA | 20230704 | 7 | Ndata | 1346.1 | 1346 | 1346.1 | 1346.1 | 1346 |
| FN | 20230704 | 7 | Sample | 1426.7 | 1426.6 | 1426.6 | 1426.6 | 1426.7 |

Table : Part II - Mass of fibres (recorded in mg) released

in each of the 41 wash cycles performed with the 12 donor garments. FA: filter before filtration (reference data always presented first), FN: filter after filtration (reference data always presented first), Ndata: measurement type – reference, Sdata: measurement type – Sample, Date: expressed as year/month/day.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Filter | Date | Wash | Type | Mass1 | Mass2 | Mass3 | Mass4 | Mass5 |
| FA | 20230705 | 8 | Ndata | 1360.6 | 1360.7 | 1360.7 | 1360.7 | 1360.7 |
| FN | 20230705 | 8 | Ndata | 1360.7 | 1360.7 | 1360.8 | 1360.7 | 1360.7 |
| FA | 20230705 | 8 | Ndata | 1342.1 | 1342 | 1342.1 | 1342.1 | 1342.2 |
| FN | 20230705 | 8 | Sample | 1434.4 | 1434.3 | 1434.3 | 1434.4 | 1434.3 |
| FA | 20230707 | 9 | Ndata | 1360.7 | 1360.7 | 1360.8 | 1360.7 | 1360.7 |
| FN | 20230707 | 9 | Ndata | 1360.8 | 1360.9 | 1360.8 | 1360.8 | 1360.9 |
| FA | 20230707 | 9 | Ndata | 1341.3 | 1341.3 | 1341.4 | 1341.3 | 1341.4 |
| FN | 20230707 | 9 | Sample | 1439.4 | 1439.4 | 1439.4 | 1439.4 | 1439.3 |
| FA | 20230710 | 10 | Ndata | 1339.1 | 1339 | 1339.1 | 1339 | 1339 |
| FN | 20230710 | 10 | Ndata | 1360.7 | 1360.6 | 1360.6 | 1360.6 | 1360.7 |
| FA | 20230710 | 10 | Ndata | 1360.7 | 1360.7 | 1360.8 | 1360.7 | 1360.7 |
| FN | 20230710 | 10 | Sample | 1462.4 | 1462.2 | 1462.2 | 1462.2 | 1462.3 |
| FA | 20230711 | 11 | Ndata | 1360.6 | 1360.6 | 1360.7 | 1360.7 | 1360.7 |
| FN | 20230711 | 11 | Ndata | 1360.7 | 1360.6 | 1360.6 | 1360.6 | 1360.7 |
| FA | 20230711 | 11 | Ndata | 1338.3 | 1338.3 | 1338.2 | 1338.3 | 1338.2 |
| FN | 20230711 | 11 | Sample | 1425.7 | 1425.8 | 1425.8 | 1425.7 | 1425.8 |
| FA | 20230712 | 12 | Ndata | 1360.7 | 1360.6 | 1360.7 | 1360.7 | 1360.8 |
| FN | 20230712 | 12 | Ndata | 1360.7 | 1360.6 | 1360.6 | 1360.7 | 1360.6 |
| FA | 20230712 | 12 | Ndata | 1342.5 | 1342.5 | 1342.6 | 1342.6 | 1342.6 |
| FN | 20230712 | 12 | Sample | 1420.4 | 1420.3 | 1420.3 | 1420.3 | 1420.3 |
| FA | 20230713 | 13 | Ndata | 1360.7 | 1360.6 | 1360.6 | 1360.7 | 1360.6 |
| FN | 20230713 | 13 | Ndata | 1360.9 | 1360.9 | 1360.8 | 1360.8 | 1360.8 |
| FA | 20230713 | 13 | Ndata | 1341.6 | 1341.7 | 1341.7 | 1341.6 | 1341.7 |
| FN | 20230713 | 13 | Sample | 1427.6 | 1427.6 | 1427.5 | 1427.5 | 1427.6 |
| FA | 20230714 | 14 | Ndata | 1360.9 | 1360.9 | 1360.8 | 1360.8 | 1360.8 |
| FN | 20230714 | 14 | Ndata | 1360.5 | 1360.6 | 1360.6 | 1360.6 | 1360.6 |
| FA | 20230714 | 14 | Ndata | 1341.7 | 1341.7 | 1341.8 | 1341.7 | 1341.7 |
| FN | 20230714 | 14 | Sample | 1432.3 | 1432.2 | 1432.3 | 1432.3 | 1432.2 |

Table : Part III - Mass of fibres (recorded in mg) released

in each of the 41 wash cycles performed with the 12 donor garments. FA: filter before filtration (reference data always presented first), FN: filter after filtration (reference data always presented first), Ndata: measurement type – reference, Sdata: measurement type – Sample, Date: expressed as year/month/day.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Filter | Date | Wash | Type | Mass1 | Mass2 | Mass3 | Mass4 | Mass5 |
| FA | 20230717 | 15 | Ndata | 1360.5 | 1360.4 | 1360.4 | 1360.6 | 1360.5 |
| FN | 20230717 | 15 | Ndata | 1360.6 | 1360.5 | 1360.6 | 1360.6 | 1360.6 |
| FA | 20230717 | 15 | Ndata | 1339.9 | 1339.8 | 1339.8 | 1339.8 | 1339.9 |
| FN | 20230717 | 15 | Sample | 1432.5 | 1432.4 | 1432.4 | 1432.3 | 1432.4 |
| FA | 20230720 | 16 | Ndata | 1360.5 | 1360.6 | 1360.6 | 1360.6 | 1360.6 |
| FN | 20230720 | 16 | Ndata | 1360.9 | 1360.8 | 1360.8 | 1360.8 | 1360.8 |
| FA | 20230720 | 16 | Ndata | 1336.9 | 1337 | 1337 | 1336.9 | 1337.1 |
| FN | 20230720 | 16 | Sample | 1449.2 | 1449.2 | 1449.1 | 1449.2 | 1449.2 |
| FA | 20230731 | 17 | Ndata | 1360.9 | 1360.8 | 1360.8 | 1360.8 | 1360.8 |
| FN | 20230731 | 17 | Ndata | 1360.6 | 1360.6 | 1360.5 | 1360.6 | 1360.6 |
| FA | 20230731 | 17 | Ndata | 1337 | 1337 | 1337 | 1336.9 | 1337 |
| FN | 20230731 | 17 | Sample | 1440.8 | 1440.9 | 1440.9 | 1440.9 | 1440.9 |
| FA | 20230803 | 18 | Ndata | 1360.6 | 1360.6 | 1360.5 | 1360.6 | 1360.6 |
| FN | 20230803 | 18 | Ndata | 1360.7 | 1360.8 | 1360.7 | 1360.7 | 1360.6 |
| FA | 20230803 | 18 | Ndata | 1342.6 | 1342.6 | 1342.6 | 1342.5 | 1342.5 |
| FN | 20230803 | 18 | Sample | 1442.5 | 1442.6 | 1442.5 | 1442.5 | 1442.6 |
| FA | 20230807 | 19 | Ndata | 1360.7 | 1360.8 | 1360.7 | 1360.7 | 1360.6 |
| FN | 20230807 | 19 | Ndata | 1360.4 | 1360.4 | 1360.4 | 1360.3 | 1360.4 |
| FA | 20230807 | 19 | Ndata | 1341.9 | 1341.9 | 1341.9 | 1341.8 | 1341.9 |
| FN | 20230807 | 19 | Sample | 1454.6 | 1454.5 | 1454.6 | 1454.6 | 1454.6 |
| FA | 20230811 | 20 | Ndata | 1360.4 | 1360.4 | 1360.4 | 1360.3 | 1360.4 |
| FN | 20230811 | 20 | Ndata | 1360.6 | 1360.5 | 1360.5 | 1360.6 | 1360.5 |
| FA | 20230811 | 20 | Ndata | 1341.4 | 1341.5 | 1341.4 | 1341.4 | 1341.5 |
| FN | 20230811 | 20 | Sample | 1453.8 | 1453.8 | 1453.7 | 1453.8 | 1453.8 |
| FA | 20230813 | 21 | Ndata | 1360.6 | 1360.5 | 1360.5 | 1360.6 | 1360.5 |
| FN | 20230813 | 21 | Ndata | 1360.3 | 1360.4 | 1360.3 | 1360.3 | 1360.4 |
| FA | 20230813 | 21 | Ndata | 1337.4 | 1337.5 | 1337.5 | 1337.5 | 1337.4 |
| FN | 20230813 | 21 | Sample | 1436 | 1436.1 | 1436 | 1436 | 1436.1 |

Table : Part IV - Mass of fibres (recorded in mg) released

in each of the 41 wash cycles performed with the 12 donor garments. FA: filter before filtration (reference data always presented first), FN: filter after filtration (reference data always presented first), Ndata: measurement type – reference, Sdata: measurement type – Sample, Date: expressed as year/month/day.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Filter | Date | Wash | Type | Mass1 | Mass2 | Mass3 | Mass4 | Mass5 |
| FA | 20230814 | 22 | Ndata | 1360.3 | 1360.4 | 1360.3 | 1360.3 | 1360.4 |
| FN | 20230814 | 22 | Ndata | 1360.5 | 1360.5 | 1360.6 | 1360.7 | 1360.6 |
| FA | 20230814 | 22 | Ndata | 1338.2 | 1338.3 | 1338.2 | 1338.2 | 1338.3 |
| FN | 20230814 | 22 | Sample | 1451.2 | 1451.2 | 1451.2 | 1451.2 | 1451.1 |
| FA | 20230819 | 23 | Ndata | 1360.5 | 1360.5 | 1360.6 | 1360.7 | 1360.6 |
| FN | 20230819 | 23 | Ndata | 1360.5 | 1360.5 | 1360.4 | 1360.4 | 1360.5 |
| FA | 20230819 | 23 | Ndata | 1337.7 | 1337.8 | 1337.8 | 1337.7 | 1337.8 |
| FN | 20230819 | 23 | Sample | 1427.5 | 1427.6 | 1427.5 | 1427.5 | 1427.6 |
| FA | 20230810 | 24 | Ndata | 1360.5 | 1360.5 | 1360.4 | 1360.4 | 1360.5 |
| FN | 20230810 | 24 | Ndata | 1360.4 | 1360.3 | 1360.3 | 1360.4 | 1360.3 |
| FA | 20230810 | 24 | Ndata | 1342.1 | 1342 | 1342.1 | 1342.1 | 1342.1 |
| FN | 20230810 | 24 | Sample | 1435.1 | 1435.1 | 1435.2 | 1435.2 | 1435.1 |
| FA | 20230921 | 25 | Ndata | 1360.4 | 1360.3 | 1360.3 | 1360.4 | 1360.3 |
| FN | 20230921 | 25 | Ndata | 1360.7 | 1360.7 | 1360.7 | 1360.8 | 1360.7 |
| FA | 20230921 | 25 | Ndata | 1341.7 | 1341.6 | 1341.6 | 1341.7 | 1341.6 |
| FN | 20230921 | 25 | Sample | 1423.6 | 1423.6 | 1423.5 | 1423.5 | 1423.5 |
| FA | 20230922 | 26 | Ndata | 1360.7 | 1360.7 | 1360.7 | 1360.8 | 1360.7 |
| FN | 20230922 | 26 | Ndata | 1360.4 | 1360.4 | 1360.4 | 1360.5 | 1360.4 |
| FA | 20230922 | 26 | Ndata | 1341.2 | 1341.1 | 1341.1 | 1341.1 | 1341.2 |
| FN | 20230922 | 26 | Sample | 1443.9 | 1443.8 | 1443.9 | 1443.9 | 1443.9 |
| FA | 20230925 | 27 | Ndata | 1360.4 | 1360.4 | 1360.4 | 1360.5 | 1360.4 |
| FN | 20230925 | 27 | Ndata | 1360.8 | 1360.8 | 1360.9 | 1360.8 | 1360.8 |
| FA | 20230925 | 27 | Ndata | 1337.3 | 1337.3 | 1337.4 | 1337.3 | 1337.3 |
| FN | 20230925 | 27 | Sample | 1440.1 | 1440.2 | 1440.1 | 1440.1 | 1440.1 |
| FA | 20230926 | 28 | Ndata | 1360.8 | 1360.8 | 1360.9 | 1360.8 | 1360.8 |
| FN | 20230926 | 28 | Ndata | 1360.8 | 1360.8 | 1360.9 | 1360.8 | 1360.8 |
| FA | 20230926 | 28 | Ndata | 1338 | 1338.1 | 1338.1 | 1338.1 | 1338.1 |
| FN | 20230926 | 28 | Sample | 1440 | 1440 | 1440 | 1440.1 | 1440.1 |

Table : Part V - Mass of fibres (recorded in mg) released

in each of the 41 wash cycles performed with the 12 donor garments. FA: filter before filtration (reference data always presented first), FN: filter after filtration (reference data always presented first), Ndata: measurement type – reference, Sdata: measurement type – Sample, Date: expressed as year/month/day.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Filter | Date | Wash | Type | Mass1 | Mass2 | Mass3 | Mass4 | Mass5 |
| FA | 20230927 | 29 | Ndata | 1360.8 | 1360.8 | 1360.9 | 1360.8 | 1360.8 |
| FN | 20230927 | 29 | Ndata | 1360.7 | 1360.7 | 1360.6 | 1360.6 | 1360.6 |
| FA | 20230927 | 29 | Ndata | 1336 | 1336.1 | 1336 | 1336 | 1336.1 |
| FN | 20230927 | 29 | Sample | 1433.2 | 1433.2 | 1433.2 | 1433.1 | 1433.2 |
| FA | 20230929 | 30 | Ndata | 1360.7 | 1360.7 | 1360.6 | 1360.6 | 1360.6 |
| FN | 20230929 | 30 | Ndata | 1360.7 | 1360.6 | 1360.6 | 1360.8 | 1360.7 |
| FA | 20230929 | 30 | Ndata | 1340.6 | 1340.5 | 1340.5 | 1340.5 | 1340.5 |
| FN | 20230929 | 30 | Sample | 1444.8 | 1444.7 | 1444.7 | 1444.7 | 1444.7 |
| FA | 20231002 | 31 | Ndata | 1360.7 | 1360.6 | 1360.6 | 1360.8 | 1360.7 |
| FN | 20231002 | 31 | Ndata | 1360.7 | 1360.7 | 1360.8 | 1360.7 | 1360.7 |
| FA | 20231002 | 31 | Ndata | 1341 | 1341 | 1341 | 1340.9 | 1341 |
| FN | 20231002 | 31 | Sample | 1434.2 | 1434.1 | 1434 | 1434.1 | 1434 |
| FA | 20231009 | 32 | Ndata | 1360.7 | 1360.7 | 1360.8 | 1360.7 | 1360.7 |
| FN | 20231009 | 32 | Ndata | 1360.6 | 1360.6 | 1360.6 | 1360.5 | 1360.6 |
| FA | 20231009 | 32 | Ndata | 1341.4 | 1341.3 | 1341.3 | 1341.3 | 1341.3 |
| FN | 20231009 | 32 | Sample | 1437.1 | 1437.1 | 1437.1 | 1437 | 1437.1 |
| FA | 20231010 | 33 | Ndata | 1360.6 | 1360.6 | 1360.6 | 1360.5 | 1360.6 |
| FN | 20231010 | 33 | Ndata | 1360.6 | 1360.6 | 1360.6 | 1360.6 | 1360.7 |
| FA | 20231010 | 33 | Ndata | 1335.8 | 1335.9 | 1335.9 | 1335.9 | 1335.9 |
| FN | 20231010 | 33 | Sample | 1429.1 | 1429.2 | 1429.2 | 1429.1 | 1429.2 |
| FA | 20231012 | 34 | Ndata | 1360.6 | 1360.6 | 1360.6 | 1360.6 | 1360.7 |
| FN | 20231012 | 34 | Ndata | 1360.5 | 1360.6 | 1360.6 | 1360.5 | 1360.5 |
| FA | 20231012 | 34 | Ndata | 1337.7 | 1337.8 | 1337.8 | 1337.8 | 1337.7 |
| FN | 20231012 | 34 | Sample | 1426.2 | 1426.1 | 1426.1 | 1426.2 | 1426.1 |
| FA | 20231013 | 35 | Ndata | 1360.5 | 1360.6 | 1360.6 | 1360.5 | 1360.5 |
| FN | 20231013 | 35 | Ndata | 1360.5 | 1360.5 | 1360.5 | 1360.4 | 1360.4 |
| FA | 20231013 | 35 | Ndata | 1341 | 1341 | 1341 | 1340.9 | 1340.9 |
| FN | 20231013 | 35 | Sample | 1428.3 | 1428.3 | 1428.3 | 1428.3 | 1428.1 |

Table : Part VI - Mass of fibres (recorded in mg) released

in each of the 41 wash cycles performed with the 12 donor garments. FA: filter before filtration (reference data always presented first), FN: filter after filtration (reference data always presented first), Ndata: measurement type – reference, Sdata: measurement type – Sample, Date: expressed as year/month/day.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Filter | Date | Wash | Type | Mass1 | Mass2 | Mass3 | Mass4 | Mass5 |
| FA | 20231016 | 36 | Ndata | 1360.5 | 1360.5 | 1360.5 | 1360.4 | 1360.4 |
| FN | 20231016 | 36 | Ndata | 1360.5 | 1360.5 | 1360.4 | 1360.4 | 1360.5 |
| FA | 20231016 | 36 | Ndata | 1338.5 | 1338.4 | 1338.4 | 1338.5 | 1338.5 |
| FN | 20231016 | 36 | Sample | 1436.8 | 1436.8 | 1436.7 | 1436.8 | 1436.8 |
| FA | 20231018 | 37 | Ndata | 1360.5 | 1360.5 | 1360.4 | 1360.4 | 1360.5 |
| FN | 20231018 | 37 | Ndata | 1360.5 | 1360.5 | 1360.4 | 1360.5 | 1360.4 |
| FA | 20231018 | 37 | Ndata | 1342.8 | 1342.7 | 1342.7 | 1342.7 | 1342.7 |
| FN | 20231018 | 37 | Sample | 1425.6 | 1425.6 | 1425.6 | 1425.7 | 1425.6 |
| FA | 20231026 | 38 | Ndata | 1360.5 | 1360.5 | 1360.4 | 1360.5 | 1360.4 |
| FN | 20231026 | 38 | Ndata | 1360.6 | 1360.6 | 1360.5 | 1360.6 | 1360.5 |
| FA | 20231026 | 38 | Ndata | 1335.8 | 1335.8 | 1335.7 | 1335.7 | 1335.7 |
| FN | 20231026 | 38 | Sample | 1430.6 | 1430.6 | 1430.7 | 1430.7 | 1430.7 |
| FA | 20231027 | 39 | Ndata | 1360.6 | 1360.6 | 1360.5 | 1360.6 | 1360.5 |
| FN | 20231027 | 39 | Ndata | 1360.5 | 1360.5 | 1360.5 | 1360.5 | 1360.5 |
| FA | 20231027 | 39 | Ndata | 1340.8 | 1340.7 | 1340.8 | 1340.8 | 1340.8 |
| FN | 20231027 | 39 | Sample | 1428.5 | 1428.5 | 1428.6 | 1428.5 | 1428.5 |
| FA | 20231030 | 40 | Ndata | 1360.6 | 1360.6 | 1360.5 | 1360.6 | 1360.5 |
| FN | 20231030 | 40 | Ndata | 1360.6 | 1360.6 | 1360.7 | 1360.6 | 1360.6 |
| FA | 20231030 | 40 | Ndata | 1340.9 | 1340.8 | 1340.8 | 1340.8 | 1340.7 |
| FN | 20231030 | 40 | Sample | 1436 | 1436.1 | 1436.1 | 1436 | 1436 |
| FA | 20231101 | 41 | Ndata | 1360.6 | 1360.6 | 1360.7 | 1360.6 | 1360.6 |
| FN | 20231101 | 41 | Ndata | 1360.5 | 1360.5 | 1360.6 | 1360.6 | 1360.6 |
| FA | 20231101 | 41 | Ndata | 1340.8 | 1340.8 | 1340.8 | 1340.8 | 1340.7 |
| FN | 20231101 | 41 | Sample | 1427.1 | 1427.2 | 1427.1 | 1427.2 | 1427.1 |

Raw data – Pearson correlation, Fibre VS Volume of water

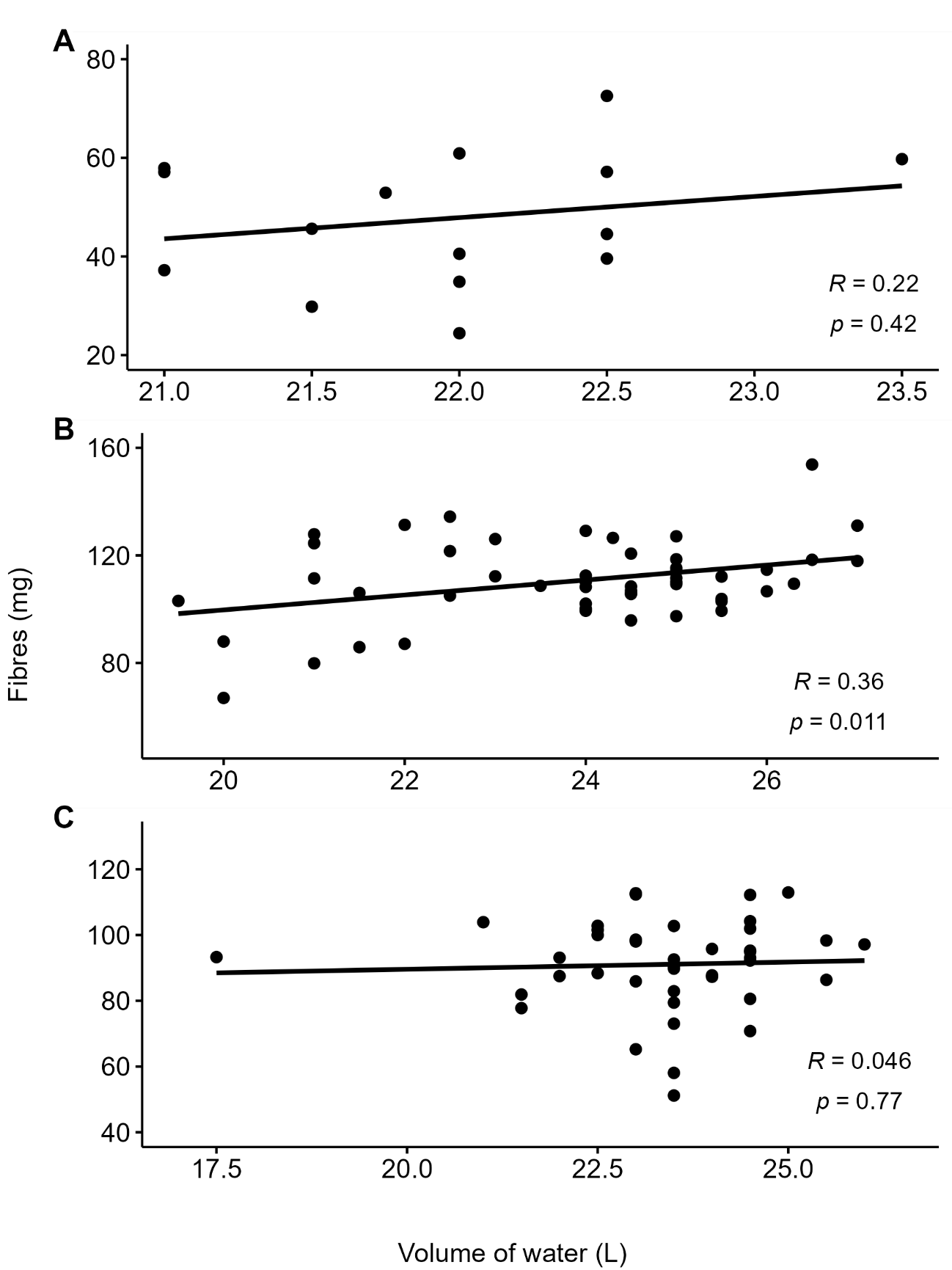


Figure : Volume of wastewater as a function of the mass of fibres

released in the wastewater. A) results obtained with washing 1 garment 15 times, B) results obtained with washing 5 garments 51 times, C) results obtained with washing twelves garments 41 times. In the bottom right, R represents the correlation coefficient and p the p-value (significance level of the t-test).

Garments inter-variability

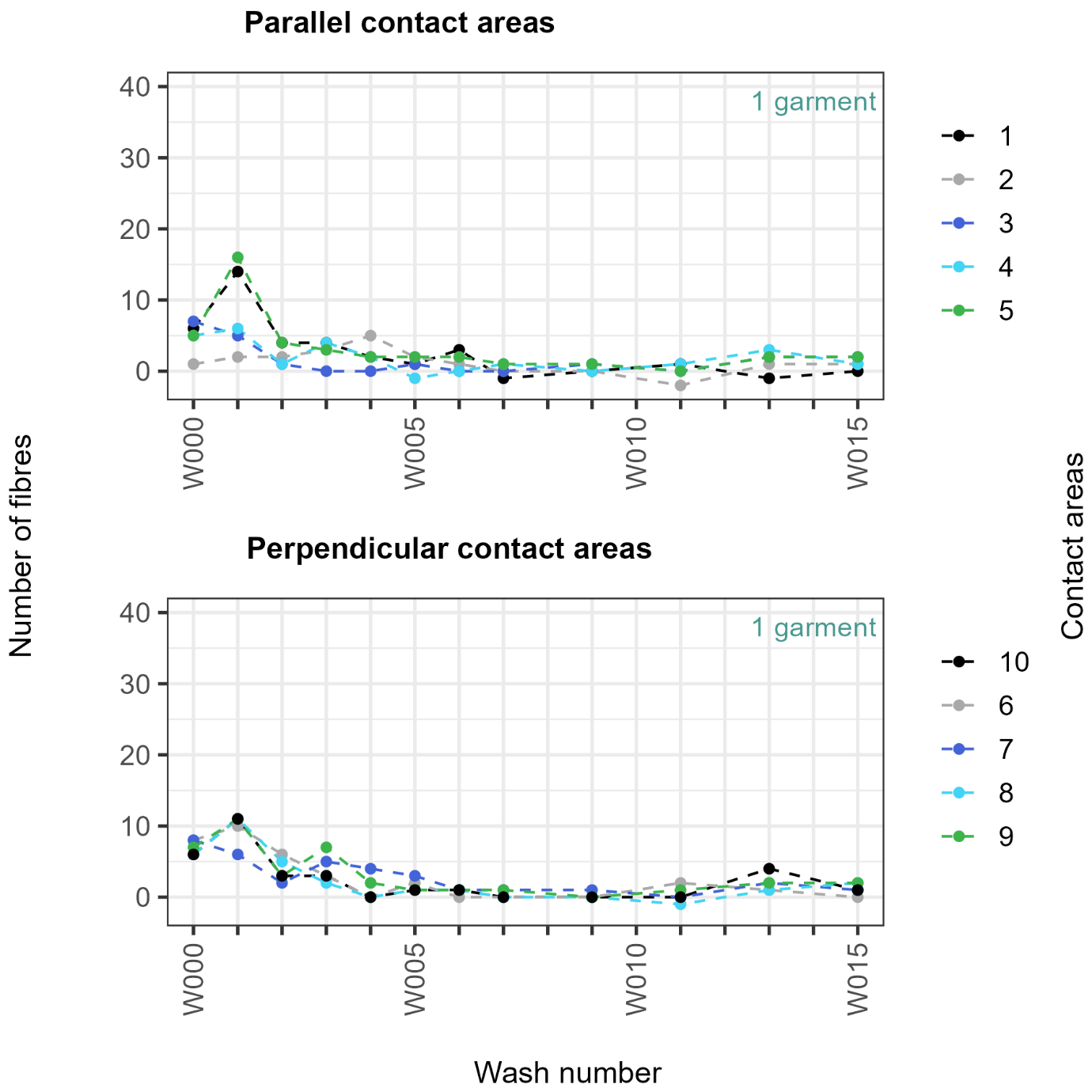


Figure : Number of fibres recovered after transfer with 1 garment washed alone

over 15 repetitive washes (1st Exp), indicated from 1 to 10. W000 correspond to the number of fibres recovered after transfer before the first wash.

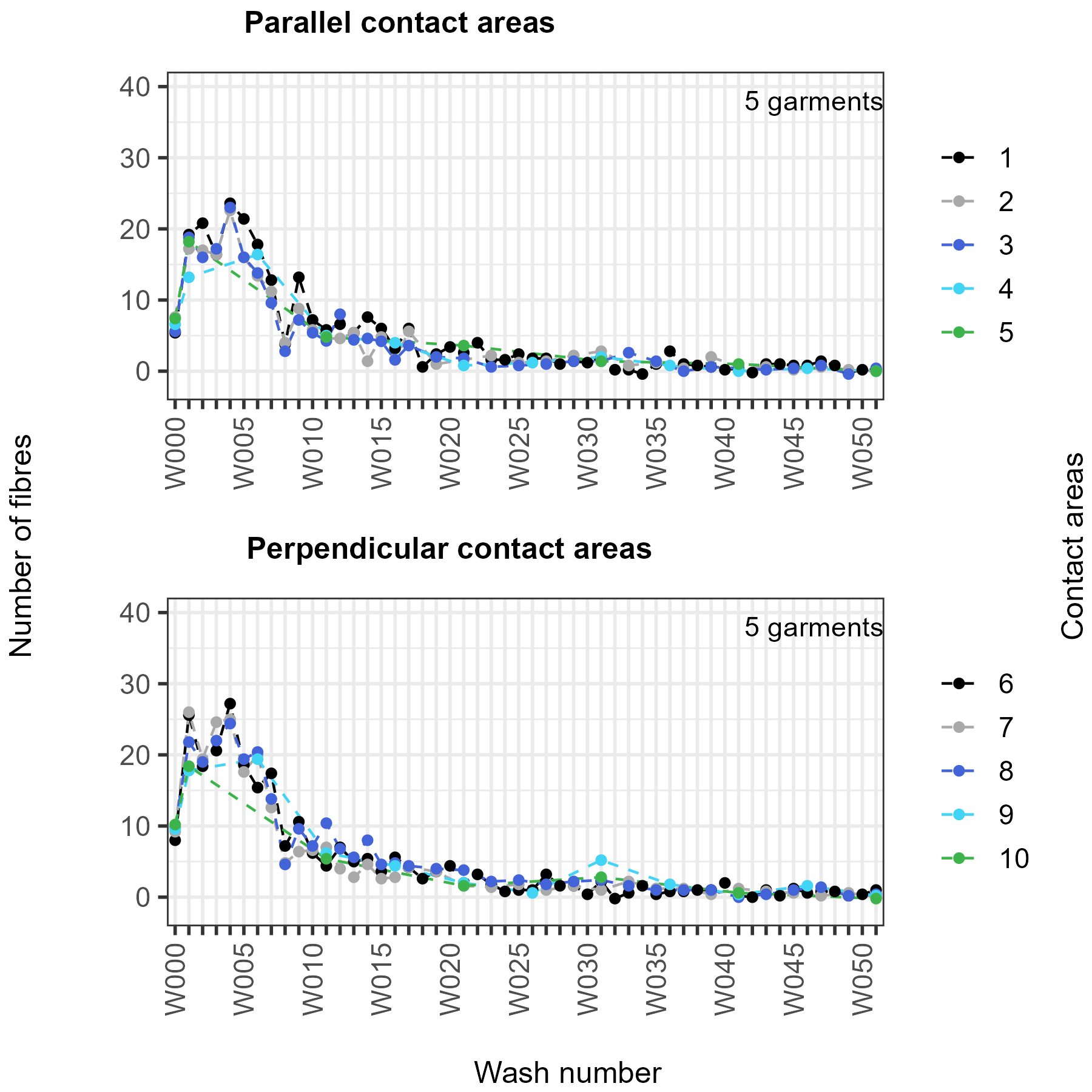


Figure : Number of fibres recovered after transfer with 5 garments washed together over 51 repetitive washes (2nd Exp), for all garments (n=5) combined by contact areas, indicated from 1 to 10. W000 correspond to the number of fibres recovered after transfer before the first wash.

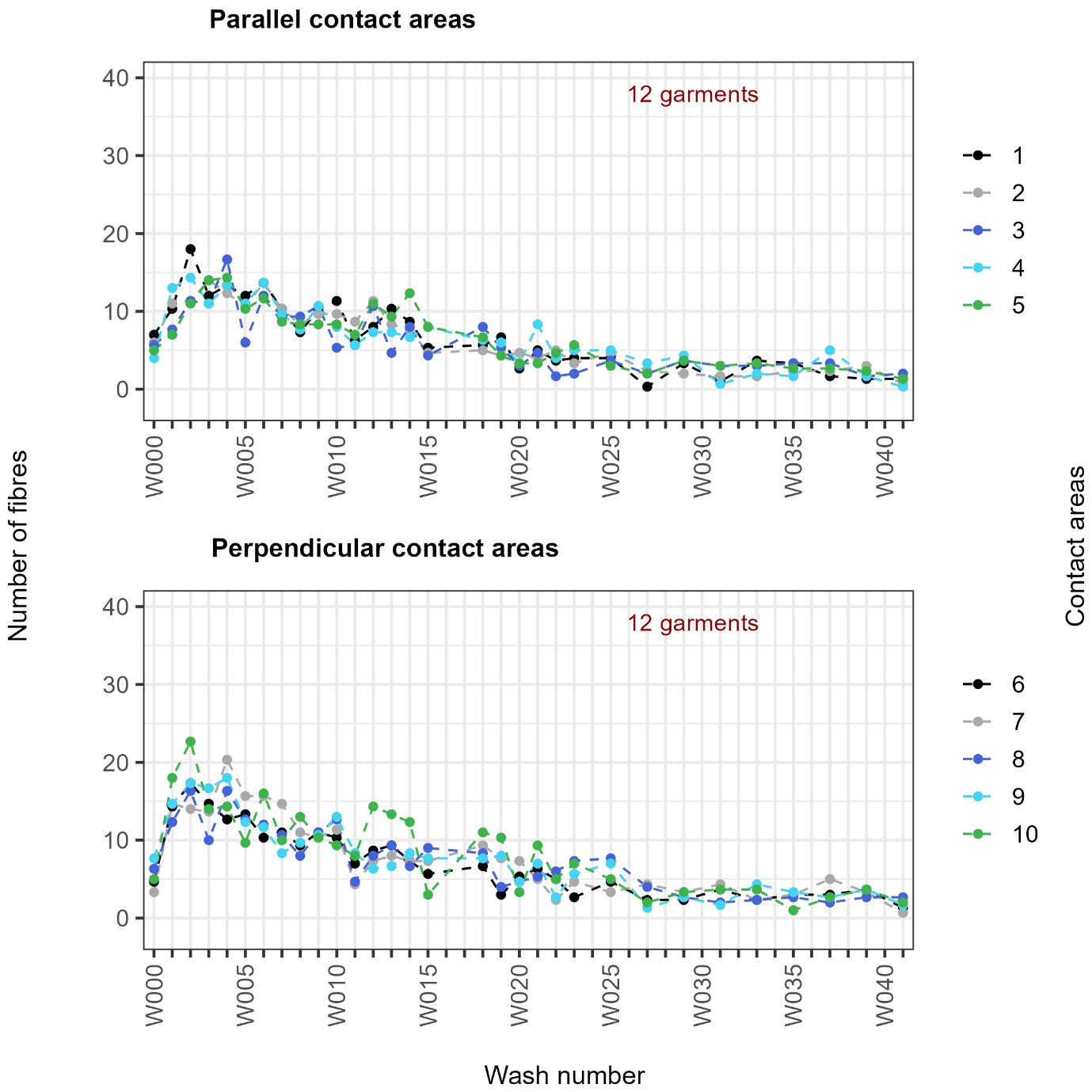


Figure : Number of fibres recovered after transfer with 12 garments washed together over 41 repetitive washes (3rd Exp), for all garments (n=3) combined by contact areas, indicated from 1 to 10. W000 correspond to the number of fibres recovered after transfer before the first wash.

Raw data – Fibre count; control garment, before transfer

Table : Part I – Number of fibres recovered on the receiver swatches before the repetitive transfers with the virgin cotton control garment. The receiver swatch number correspond to swatch later used for the repetitive transfer number performed presented page XXX.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Receiver swatch | Fibre count | Receiver swatch | Fibre count | Receiver swatch | Fibre count | Receiver swatch | Fibre count |
| 1 | 1 | 26 | 1 | 51 | 0 | 76 | 0 |
| 2 | 0 | 27 | 0 | 52 | 0 | 77 | 0 |
| 3 | 0 | 28 | 0 | 53 | 0 | 78 | 0 |
| 4 | 0 | 29 | 0 | 54 | 0 | 79 | 0 |
| 5 | 0 | 30 | 0 | 55 | 0 | 80 | 0 |
| 6 | 0 | 31 | 0 | 56 | 0 | 81 | 0 |
| 7 | 0 | 32 | 0 | 57 | 0 | 82 | 0 |
| 8 | 0 | 33 | 0 | 58 | 0 | 83 | 0 |
| 9 | 0 | 34 | 0 | 59 | 0 | 84 | 0 |
| 10 | 0 | 35 | 0 | 60 | 0 | 85 | 0 |
| 11 | 0 | 36 | 0 | 61 | 0 | 86 | 0 |
| 12 | 1 | 37 | 1 | 62 | 0 | 87 | 0 |
| 13 | 0 | 38 | 0 | 63 | 0 | 88 | 0 |
| 14 | 0 | 39 | 0 | 64 | 0 | 89 | 0 |
| 15 | 0 | 40 | 0 | 65 | 0 | 90 | 0 |
| 16 | 0 | 41 | 0 | 66 | 0 | 91 | 0 |
| 17 | 0 | 42 | 0 | 67 | 0 | 92 | 1 |
| 18 | 1 | 43 | 1 | 68 | 0 | 93 | 0 |
| 19 | 0 | 44 | 0 | 69 | 0 | 94 | 0 |
| 20 | 0 | 45 | 0 | 70 | 0 | 95 | 0 |
| 21 | 0 | 46 | 0 | 71 | 0 | 96 | 0 |
| 22 | 0 | 47 | 0 | 72 | 0 | 97 | 0 |
| 23 | 0 | 48 | 0 | 73 | 0 | 98 | 0 |
| 24 | 0 | 49 | 0 | 74 | 0 | 99 | 0 |
| 25 | 0 | 50 | 0 | 75 | 0 | 100 | 0 |

Table : Part II – Number of fibres recovered on the receiver swatches before the repetitive transfers with the virgin cotton control garment. The receiver swatch number correspond to swatch later used for the repetitive transfer number performed presented page XXX.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Receiver swatch | Fibre count | Receiver swatch | Fibre count | Receiver swatch | Fibre count | Receiver swatch | Fibre count |
| 1 | 0 | 26 | 0 | 51 | 0 | 76 | 1 |
| 2 | 0 | 27 | 0 | 52 | 0 | 77 | 0 |
| 3 | 0 | 28 | 0 | 53 | 0 | 78 | 1 |
| 4 | 0 | 29 | 0 | 54 | 0 | 79 | 1 |
| 5 | 0 | 30 | 0 | 55 | 1 | 80 | 0 |
| 6 | 0 | 31 | 0 | 56 | 0 | 81 | 0 |
| 7 | 0 | 32 | 0 | 57 | 0 | 82 | 0 |
| 8 | 1 | 33 | 0 | 58 | 0 | 83 | 0 |
| 9 | 0 | 34 | 0 | 59 | 0 | 84 | 0 |
| 10 | 0 | 35 | 0 | 60 | 0 | 85 | 0 |
| 11 | 0 | 36 | 0 | 61 | 0 | 86 | 0 |
| 12 | 0 | 37 | 0 | 62 | 0 | 87 | 0 |
| 13 | 0 | 38 | 0 | 63 | 0 | 88 | 1 |
| 14 | 1 | 39 | 0 | 64 | 2 | 89 | 0 |
| 15 | 0 | 40 | 1 | 65 | 0 | 90 | 0 |
| 16 | 0 | 41 | 0 | 66 | 0 | 91 | 0 |
| 17 | 0 | 42 | 0 | 67 | 0 | 92 | 0 |
| 18 | 0 | 43 | 0 | 68 | 0 | 93 | 0 |
| 19 | 0 | 44 | 0 | 69 | 3 | 94 | 1 |
| 20 | 0 | 45 | 0 | 70 | 0 | 95 | 0 |
| 21 | 0 | 46 | 0 | 71 | 0 | 96 | 0 |
| 22 | 0 | 47 | 0 | 72 | 0 | 97 | 0 |
| 23 | 0 | 48 | 0 | 73 | 0 | 98 | 0 |
| 24 | 0 | 49 | 0 | 74 | 0 | 99 | 0 |
| 1 | 0 | 26 | 0 | 51 | 0 | 76 | 1 |

Table : Part III – Number of fibres recovered on the receiver swatches before the repetitive transfers with the virgin cotton control garment. The receiver swatch number correspond to swatch later used for the repetitive transfer number performed presented page XXX.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Receiver swatch | Fibre count | Receiver swatch | Fibre count | Receiver swatch | Fibre count | Receiver swatch | Fibre count |
| 1 | 0 | 26 | 0 | 51 | 0 | 76 | 0 |
| 2 | 0 | 27 | 0 | 52 | 0 | 77 | 0 |
| 3 | 0 | 28 | 0 | 53 | 0 | 78 | 0 |
| 4 | 0 | 29 | 0 | 54 | 0 | 79 | 2 |
| 5 | 0 | 30 | 1 | 55 | 0 | 80 | 0 |
| 6 | 0 | 31 | 0 | 56 | 0 | 81 | 0 |
| 7 | 0 | 32 | 0 | 57 | 0 | 82 | 0 |
| 8 | 0 | 33 | 0 | 58 | 0 | 83 | 0 |
| 9 | 0 | 34 | 0 | 59 | 0 | 84 | 0 |
| 10 | 0 | 35 | 0 | 60 | 0 | 85 | 0 |
| 11 | 0 | 36 | 0 | 61 | 0 | 86 | 0 |
| 12 | 0 | 37 | 0 | 62 | 0 | 87 | 0 |
| 13 | 0 | 38 | 1 | 63 | 0 | 88 | 0 |
| 14 | 0 | 39 | 0 | 64 | 0 | 89 | 0 |
| 15 | 0 | 40 | 0 | 65 | 0 | 90 | 0 |
| 16 | 1 | 41 | 1 | 66 | 0 | 91 | 0 |
| 17 | 0 | 42 | 0 | 67 | 0 | 92 | 0 |
| 18 | 0 | 43 | 0 | 68 | 0 | 93 | 0 |
| 19 | 0 | 44 | 0 | 69 | 0 | 94 | 0 |
| 20 | 0 | 45 | 0 | 70 | 0 | 95 | 0 |
| 21 | 0 | 46 | 0 | 71 | 0 | 96 | 1 |
| 22 | 0 | 47 | 0 | 72 | 0 | 97 | 0 |
| 23 | 0 | 48 | 0 | 73 | 0 | 98 | 0 |
| 24 | 0 | 49 | 0 | 74 | 0 | 99 | 0 |
| 25 | 0 | 50 | 0 | 75 | 0 | 100 | 0 |

Table : Part IV – Number of fibres recovered on the receiver swatches before the repetitive transfers with the virgin cotton control garment. The receiver swatch number correspond to swatch later used for the repetitive transfer number performed presented page XXX.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Receiver swatch | Fibre count | Receiver swatch | Fibre count | Receiver swatch | Fibre count | Receiver swatch | Fibre count |
| 1 | 0 | 26 | 0 | 51 | 0 | 76 | 0 |
| 2 | 0 | 27 | 0 | 52 | 0 | 77 | 0 |
| 3 | 0 | 28 | 0 | 53 | 0 | 78 | 0 |
| 4 | 0 | 29 | 0 | 54 | 0 | 79 | 2 |
| 5 | 0 | 30 | 0 | 55 | 0 | 80 | 0 |
| 6 | 0 | 31 | 0 | 56 | 0 | 81 | 0 |
| 7 | 0 | 32 | 0 | 57 | 1 | 82 | 0 |
| 8 | 0 | 33 | 0 | 58 | 0 | 83 | 1 |
| 9 | 0 | 34 | 0 | 59 | 0 | 84 | 0 |
| 10 | 0 | 35 | 0 | 60 | 0 | 85 | 0 |
| 11 | 0 | 36 | 0 | 61 | 0 | 86 | 0 |
| 12 | 0 | 37 | 0 | 62 | 1 | 87 | 0 |
| 13 | 0 | 38 | 0 | 63 | 0 | 88 | 0 |
| 14 | 0 | 39 | 0 | 64 | 0 | 89 | 0 |
| 15 | 0 | 40 | 0 | 65 | 0 | 90 | 0 |
| 16 | 0 | 41 | 0 | 66 | 0 | 91 | 0 |
| 17 | 1 | 42 | 0 | 67 | 0 | 92 | 0 |
| 18 | 0 | 43 | 0 | 68 | 0 | 93 | 0 |
| 19 | 0 | 44 | 0 | 69 | 0 | 94 | 0 |
| 20 | 0 | 45 | 0 | 70 | 0 | 95 | 0 |
| 21 | 0 | 46 | 1 | 71 | 0 | 96 | 0 |
| 22 | 0 | 47 | 0 | 72 | 0 | 97 | 0 |
| 23 | 0 | 48 | 0 | 73 | 0 | 98 | 0 |
| 24 | 0 | 49 | 0 | 74 | 0 | 99 | 0 |
| 25 | 0 | 50 | 0 | 75 | 0 | 100 | 0 |

Raw data – Fibre count; control garment, after transfer

Raw data – Fibre count; 1 garment washed alone, before transfer

Raw data – Fibre count; 1 garment washed alone, after transfer

Raw data – Fibre count; 5 garments washed alone, before transfer

Raw data – Fibre count; 5 garments washed alone, after transfer

Raw data – Fibre count; 12 garments washed alone, before transfer

Raw data – Fibre count; 12 garments washed alone, after transfer