

FREQUENTLY ASKED QUESTIONS

1. Terminology & Introduction

1.1. Definition of a microfibre?

Microfibre is synthetic fibre finer than one denier or decitex.

The most common types of microfiber are made variously of polyesters, polyamides (e.g. nylon, Kevlar, Nomex), and combinations of polyester, polyamide, and polypropylene.

Microfiber is used to make mats, knits, and weaves, for apparel, upholstery, industrial filters, and cleaning products. The shape, size, and combinations of synthetic fibers are chosen for specific characteristics, including softness, toughness, absorption, water repellence, electrostatics, and filtering ability.

Typically PET & Viscose fibers are 1.7dtex

1.2. What does splittable / bi-component fiber mean?

Bicomponent fibre is made of two materials, utilizing desired properties of each material.

Segmented - Segmented like sections of a pie



Before microfibre splitting



After microfibre splitting

1.3. What is PCR - Post-Consumer Recycled Content?

PCR involves materials that consumers have used and disposed of. Think of aluminium cans, newspapers, or plastic bottles.

These materials are diverted from landfills and transformed into new products or packaging.

PCR has a more immediate environmental impact because it deals with waste that has already been in consumers' hands.



1.4. What is PIR – Post Industrial Recycled Content?

PIR refers to materials that never reached the consumer but were generated during the manufacturing process. These include scraps, trimmings, and rejects from factories.

Essentially, PIR is waste that gets repurposed into something new instead of being discarded.

While PIR is a positive step, it's not as impactful as post-consumer content because it doesn't directly address consumer waste, but it does address waste & the use of virgin materials.



1.5. Which is better?

- Both PIR and PCR reduce the demand for virgin materials and conserve natural resources.
- However, PCR is generally considered more sustainable because it directly tackles waste disposal issues.
- But in the case of PA / Polyamide (Nylon) there is currently no waste stream to support PCR hence the use of PIR.
- Which of course is better than virgin PA.

2. Product

2.1. What is the fibre size & split profile?

- It is a 2.5dtex fiber
- 32 segment fiber

2.2. What is the breakdown of the recycled content?

- 70% rPET from PCR
- 30% PA from PIR

2.3. Is the product recyclable?

- The product is **not recyclable** for two reasons:
 - There is no infrastructure currently available that can separate the fibers from the nonwoven fabric.
 - The product is used in healthcare environments, or with chemicals, therefore the product is often contaminated and considered to be “low bio hazard” and therefore cannot be recycled.
- However, many facilities have the ability to send the product for incineration thus creating Energy Recovery – see above.
- You can check this with your waste management provider.



2.4. How do you guarantee the cleanliness of your recycled content?

- The product is approved by Berry’s Regulatory process and is aligned with our internal safety & regulatory requirements.
- This data is available on request.
- rPET is made from PET flake which is heated to 250oC and is commonly used in the production of recycled soda & water bottles.

2.5. Is the product considered low linting?

- Yes
- A copy of the test results is available on request.

2.6. Is the product designed for use in Cleanrooms?

For this application we would recommend Chicopee Veraclean Cleanroom Range which you can find at www.chicopee.com

2.7. Is the product designed for medical device applications?

“The Products are not designed and manufactured to be sold as medical devices. In addition, the Products are not intended for or supplied as being suitable for cleaning or disinfecting medical devices.”

This is in line with Berry Global Regulatory Compliance

2.8. Can it be used with chemicals as well as water?

- Suitable for use with the cleaning chemicals of your choice – disinfectants or sanitizing solutions - to reinforce your cleaning regime.



3. Certifications

3.1. Externally certified to remove 99.97% bacteria with water only

- A copy of the certification is available on request
- What is log reduction & what does it mean?

As an example, if there are one million bacteria present on a surface, a 1-log reduction would reduce the number of bacteria by 90 percent, or 100,000 bacteria remaining. A 2-log reduction removes 99 percent, leaving behind 10,000 bacteria, 3-log removes 99.9 percent to leave behind 1,000 bacteria, and so on through a 6-log kill, which leaves behind only one cell in one million. With

3.2. What is GRS?



The GRS Standard is owned by The Textile Exchange whose goal is to increase transparency and assurance for recycled fibers.

The standard is accredited by external bodies through the following.

Tracing recycled inputs from source to store.

- Recycled material verification
- Materials are verified to meet the ISO definition of “recycled”. Both pre-consumer and post-consumer material is accepted.
- Responsible production
- GRS sites are required to meet strict social and environmental requirements. Chemicals with harmful potential aren’t allowed to be used on GRS products.
- Chain of custody
- Certification makes sure the identity of the recycled content is maintained from feedstock to final product.
- Credible certification
- A professional, third-party certification body audits each stage in the supply chain.
- Confident communication
- Products that meet all requirements may be labelled with the RCS or GRS logo.
- Stakeholder engagement
- The RCS and GRS are managed with the input of producers, suppliers, brands, and retailers from all parts of the globe.

The external certifying body for our rMicrofiber fiber to GRS is Intertek. We cannot disclose the Transaction Certificate number for proprietary reason, but our legal team have provided communication that can be shared with you.



Transaction Certificate (TC)

Transaction Certificate Number [REDACTED]

for products certified to

Global Recycled Standard (GRS)

- Do you plan to have the final product GRS certified?
 - We have recently certified a non-wipe product in the wider Berry Portfolio and are currently reviewing the time line and cost to do so for rMicrofiber

3.3. How have you calculated the emissions reductions?

- **TO BE COMPLETED**

3.4. Have you carried out an LCA on the finished product?

Our 2017 LCA was carried out on our standard Microfibre.

We are currently assessing if the methodology still applies & therefore is still valid.

3.5. What is the packaging material made from – foil & carton?

- Foil is recyclable
- & made from **60% PCR Content (TRIAL TO BE COMPLETED)**
- Carton is 100% Recycled
- & is FSC Certified

3.6. Is the product certified to come in contact with food i.e. FCC?

- Designed to perform in high risk & high traffic applications such as healthcare & building care Chicopee rMicrofibre is not FCC certified.
- If you require an FCC certified product please take a look at Chicopee Lavette Super, J Cloth Compostable & Veraclean Critical Cleaning at www.chicopee.com to find a product best suited to support your cleaning regime.

3.7. Does the product conform to HACCP?

- Hazard Analysis Critical Control Points (HACCP) is a globally recognized food safety management system that identifies and controls potential hazards during food production.
- Chicopee rMicrofiber is designed to perform in high risk & high traffic applications such as healthcare & building care it is not designed for use in food applications per say.
- If you require an HACCP recommended product please take a look at Lavette Super, J Cloth Compostable & Veraclean Critical Cleaning at www.chicopee.com to find a product best suited to your cleaning requirements.

3.8. Portfolio

- To minimise our environmental impact we have launched 1 product in our portfolio. That is a quarter folded white wipe which is unprinted.
- We are however currently reviewing the method by which we print in the hope of reducing the cost of doing so.
- Should you feel that this limits your ability to succeed we are open to further discussions.

3.9. Trademark

- Trademark applied for rMicrofiber