## eppendorf



# 2<sup>nd</sup> Generation Feedstock – 1<sup>st</sup> Class Consumables

Meet your own sustainability targets with biobased Eppendorf Consumables

## Your Future Lab Perspective

»Making polymer products and components substantially and measurably more sustainable according to the »Reduce, Reuse, Recycle« concept without compromising product quality and performance«

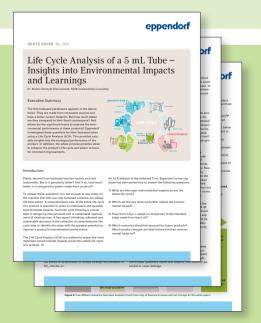
Since fossil oil-sourced plastic consumables have replaced glass consumables, they have become irreplaceable in laboratories around the world, providing quality standards needed in increasingly demanding research. This is a growing challenge in respect to sustainability.

Thus, Eppendorf not only focuses on the development of new products but also on new, more environmentally friendly manufacturing materials. In 2022 we started to offer a generation of Eppendorf Tubes® made of biobased polypropylene. Since then our biobased consumables portfolio grew with epT.I.P.S.® BioBased, Eppendorf twin.tec® Trace PCR plates BioBased and now with Eppendorf Safe-Lock Tube® BioBased.

## About Biobased Polymer for Biobased Consumables

To increase the sustainable properties of plastic used for the production of lab consumables, we must make and use plastics more sustainably using recycled and renewable feedstocks.

- > In the biobased polymer production, fossil raw material is replaced with sustainable raw material produced from biobased waste and residues (2<sup>nd</sup> generation renewable feedstock).
- > The raw materials used to produce the renewable feedstock can be backtraced to the first collection points and the origin of the renewable raw materials from carefully selected suppliers committed to sustainability is assured.
- > The final polymers are sustainability certified by »ISCC PLUS«.



#### **Environmental Impacts of biobased Eppendorf Consumables**

In our White Paper No. 093 »Life Cycle Analysis of a 5 mL Tubes -Insights into Environmental Impacts and Learnings« we answer the following questions:

- > What are the major environmental impacts across the whole life cycle?
- > Which are the key levers to further reduce the environmental impact?
- > How much CO<sub>2</sub> is saved in comparison to the standard tubes made from fossil oil?
- > Which product designs their environmental footprint?



Calculate your carbon savings online

## From Used Oil to High-Value Products



> Biobased pipette tips are available as epT.I.P.S.® BioBased Biopur®, ep Dualfilter T.I.P.S.® BioBased, and ep Dualfilter T.I.P.S.® SealMax® BioBased



> Eppendorf Tubes® BioBased, with screw caps\*1 are available in volumes of 5 mL, 15 mL, 25 mL and 50 mL



> Eppendorf Safe-Lock Tubes BioBased are available in 0.5, 1.5 and 2.0 mL in **Eppendorf Quality and PCR clean** 



> Eppendorf twin.tec® Trace PCR Plates BioBased in PCR clean are available in 3 volumes, 96 and 384 wells and as LoBind variant

#### Amount of biobased polymer in our consumables

- > The amount of biobased polymer is calculated according to mass balance approach. For detailed information visit eppendorf.link/BioBased.
- > General Quality Certificates/Compliance with Standards, product-specific and lot-specific purity certificates are available separately.

Eppendorf Tubes BioBased*1:	min. 90
Eppendorf epT.I.P.S. BioBased:	100 %
Eppendorf Safe-Lock Tubes BioBased:	100 %
Eppendorf twin.tec® Trace PCR Plates BioBased*2:	min. 86
Ennendorf Deenwell Plates BioBased*2	min 95

\*1 The screw caps are actual fossil-sourced material. The switch to biobased material will take place soon.
\*2 The value of 86 % and 95 % derive from the mixed calculation of biobased and fossil-sourced polymers for optimal stability.



> Eppendorf Deepwell Plates BioBased are available in 96 wells (2,000 µL) format; Laser-engraved lot-number and expiry date ensure traceability

## About »ISCC PLUS« Certification



ISCC PLUS (International Sustainability & Carbon Certification) is a global certification program for circular economy and bioeconomy. The certification enables traceability along the entire supply chain.

- > The Eppendorf Production Center in Oldenburg / Germany is ISCC PLUS (International Sustainability & Carbon Certification) certified
- > ISCC PLUS offers market participants and producers from the food and feed, chemical, pharmaceutical and bioplastic industries to obtain sustainability certificates. With an ISCC PLUS certification, companies ensure that the entire supply chain from agriculture to the finished end product has been audited. The certification is also applicable to products based on waste, residues and recyclable materials.
- > ISCC supports the transition to a circular economy and bioeconomy and brings many benefits to businesses and the environment like e.g.:
  - Traceability throughout the supply chain
  - Proof of identity of raw materials
  - Clear and third-party verified information
  - Strengthening consumer confidence through independent certification system

More information: www.iscc-system.org



Food Industry

Feedstock Renewable



#### Renewable Feedstock

Central collection point for renewable feedstock. e. g. from food oil waste

**Bio-Refinery** Gas

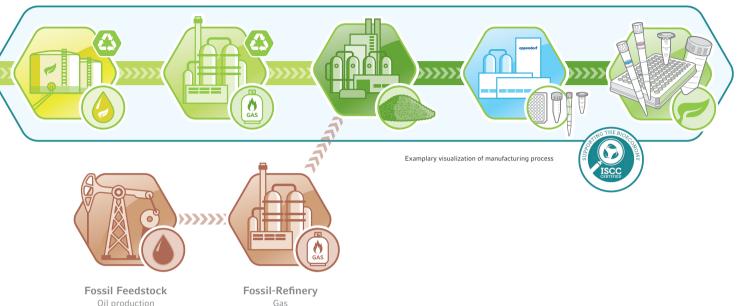
#### Polymer Manufacture

Manufacturing of polymers with applicable biobased proportion of biobased raw material

### Converter

Eppendorf Production Center

**Final Applications** Eppendorf Consumables BioBased



## About »ACT« Certification

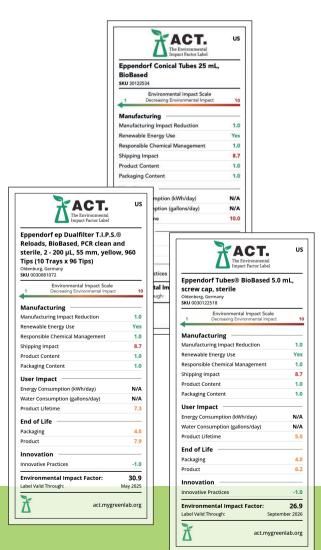
#### **Independent Validation**

mygreen lab. provides independent validation and certifies lab products with »ACT – The Environmental Impact Factor Label« as a third party organization. Meanwhile, Eppendorf has a growing number of ACT validated and certified Eppendorf products, e.g. tips, tubes, ULT freezers, pipettes, PCR cycler and more to come.

More information: https://actdatabase.mygreenlab.org

»The ACT Label was designed to address the need of both scientists and procurement specialists for clear, third-party and independently verified information about the environmental impact of laboratory products. By emphasizing Accountability, Consistency, and Transparency (ACT) around manufacturing, energy and water use, packaging, and end-of-life, ACT makes it easy to choose more sustainable products.«

More information: https://act.mygreenlab.org



## **Biobased Eppendorf Consumables**

In 2022, we launched our first biobased consumables -Eppendorf Tubes® BioBased. Since then, we have been continuously pursuing this path to more sustainability in the laboratory. In the meantime, there are also epT.I.P.S.® BioBased pipette tips with and without filters in various packaging forms, Eppendorf twin.tec® Trace PCR Plates BioBased in several formats and, of course, the "Eppi®" – Eppendorf Safe-Lock Tubes BioBased, as well as Deepwell Plates BioBased.

In the table below you will find all available "Eppendorf Consumables BioBased". Whether tips, tubes or plates replace the consumables used in your laboratory with biobased versions today and reduce the CO<sub>2</sub> footprint of your laboratory.

Pipette tips	Purity	Variants	Packaging	Order no.
epT.I.P.S.® Standard, BioBased	Eppendorf Quality	0.1-10 μL, 34 mm	Bulk	0030080033
epT.I.P.S.® Standard, BioBased	Eppendorf Quality	0.1-20 μL, 40 mm	Bulk	0030080041
epT.I.P.S.® Standard, BioBased	Eppendorf Quality	0.5-20 μL L, 46 mm	Bulk	0030080050
epT.I.P.S.® Standard, BioBased	Eppendorf Quality	2-200 μL, 53 mm	Bulk	0030080068
epT.I.P.S.® Standard, BioBased, colorless	Eppendorf Quality	20-300 μL, 55 mm	Bulk	0030080076
epT.I.P.S.® Standard, BioBased, colorless	Eppendorf Quality	50-1,000 μL, 71 mm	Bulk	0030080084
epT.I.P.S.® Standard, BioBased	Eppendorf Quality	50-1,250 μL, 76 mm	Bulk	0030080092
epT.I.P.S.® Standard, BioBased	Eppendorf Quality	50-1,250 μL L, 103 mm	Bulk	0030080114
epT.I.P.S.® Standard, BioBased	Eppendorf Quality	0.1-5 mL, 120 mm	Bulk	0030080122
epT.I.P.S.® Standard, BioBased	Eppendorf Quality	0.2-5 mL L, 175 mm	Bulk	0030080130
epT.I.P.S.® Reloads, BioBased, medium grey	Biopur	0.1-20 μL, 40 mm	Reloads	0030075420
epT.I.P.S.® Reloads, BioBased, yellow	Biopur	2-200 μL, 53 mm	Reloads	0030075439
epT.I.P.S.® Reloads, BioBased, orange	Biopur	20-300 μL, 55 mm	Reloads	0030075447
epT.I.P.S.® Reloads, BioBased, blue	Biopur	50-1,000 μL, 71 mm	Reloads	0030075455
epT.I.P.S.® Reloads, BioBased, green	Biopur	50-1,250 μL, 76 mm	Reloads	0030075463
epT.I.P.S.® Reloads, BioBased, green	Biopur	50-1,250 μL, 76 mm	Reloads	0030075471
ep Dualfilter T.I.P.S.® Reloads, medium gray	PCR clean and sterile	0.1-10 μL M, 40 mm	Reloads	0030081030
ep Dualfilter T.I.P.S.® Reloads, light gray	PCR clean and sterile	0.5-20μL L, 46 mm	Reloads	0030081048
ep Dualfilter T.I.P.S.® Reloads, yellow	PCR clean and sterile	2-20 μL, 53 mm	Reloads	0030081056
ep Dualfilter T.I.P.S.® Reloads, yellow	PCR clean and sterile	2-100 μL, 53 mm	Reloads	0030081064
ep Dualfilter T.I.P.S.® Reloads, yellow	PCR clean and sterile	2-200 μL, 55 mm	Reloads	0030081072
ep Dualfilter T.I.P.S.® Reloads, orange	PCR clean and sterile	20-300 μL, 55 mm	Reloads	0030081080
ep Dualfilter T.I.P.S.® Reloads, blue	PCR clean and sterile	50-1,000 μL, 76 mm	Reloads	0030081099
ep Dualfilter T.I.P.S.® Reloads, dark green	PCR clean and sterile	50-1,250 μL L, 103 mm	Reloads	0030081102
ep Dualfilter T.I.P.S.® SealMax, Reloads, light gray	Biopur	0.5-20 μL L, 46 mm	Reloads	0030081234
ep Dualfilter T.I.P.S.® SealMax, Reloads, yellow	Biopur	2-100 μL, 53 mm	Reloads	0030081242
ep Dualfilter T.I.P.S.® SealMax, Reloads, yellow	Biopur	2-200 μL, 55 mm	Reloads	0030081250
ep Dualfilter T.I.P.S.® SealMax, Reloads, orange	Biopur	20-300 μL, 55 mm	Reloads	0030081269
ep Dualfilter T.I.P.S.® SealMax, Reloads, blue	Biopur	50-1,000 μL, 76 mm	Reloads	0030081277



Interested in biobased **Eppendorf Consumables?** Please visit our website: www.eppendorf.link/BioBased

Tubes	Purity	Variants	Packaging	Order no.
Eppendorf Tubes® BioBased, screw cap	Sterile*	5 mL	Resealable Bags	0030122518
Eppendorf Tubes® BioBased, screw cap	Sterile*	15 mL	Resealable Bags	0030122526
Eppendorf Tubes® BioBased, screw cap	Sterile*	25 mL	Resealable Bags	0030122534
Eppendorf Tubes® BioBased, screw cap	Sterile*	50 mL	Resealable Bags	0030122542
Eppendorf Safe-Lock Tubes BioBased	Eppendorf Quality	0.5 mL	Resealable Bags	0030123042
Eppendorf Safe-Lock Tubes BioBased	Eppendorf Quality	1.5 mL	Resealable Bags	0030123085
Eppendorf Safe-Lock Tubes BioBased	Eppendorf Quality	2.0 mL	Resealable Bags	0030123166
Eppendorf Safe-Lock Tubes BioBased	PCR clean	0.5 mL	Resealable Bags	0030123069
Eppendorf Safe-Lock Tubes BioBased	PCR clean	1.5 mL	Resealable Bags	0030123140
Eppendorf Safe-Lock Tubes BioBased	PCR clean	2.0 mL	Resealable Bags	0030123182
Eppendorf twin.tec® Trace PCR Plates BioBased	Purity	Variants	Packaging	Order no.
Skirted, colorless	PCR clean	150 μL, 96 wells	Resealable Bags	0030129849
Skirted, spring green	PCR clean	150 μL, 96 wells	Resealable Bags	0030129857
LoBind, skirted, colorless	PCR clean	150 μL, 96 wells	Resealable Bags	0030531086
Semi-skirted, colorless	PCR clean	250 μL, 96 wells	Resealable Bags	0030531043

Eppendorf twin.tec® Trace PCR Plates BioBased	Purity	Variants	Packaging	Order no.
Skirted, colorless	PCR clean	150 μL, 96 wells	Resealable Bags	0030129849
Skirted, spring green	PCR clean	150 μL, 96 wells	Resealable Bags	0030129857
LoBind, skirted, colorless	PCR clean	150 μL, 96 wells	Resealable Bags	0030531086
Semi-skirted, colorless	PCR clean	250 μL, 96 wells	Resealable Bags	0030531043
LoBind, semi-skirted, colorless	PCR clean	250 μL, 96 wells	Resealable Bags	0030531060
Skirted, colorless	PCR clean	45 μL, 384 wells	Resealable Bags	0030531051
LoBind, skirted, colorless	PCR clean	45 μL, 384 wells	Resealable Bags	0030531078

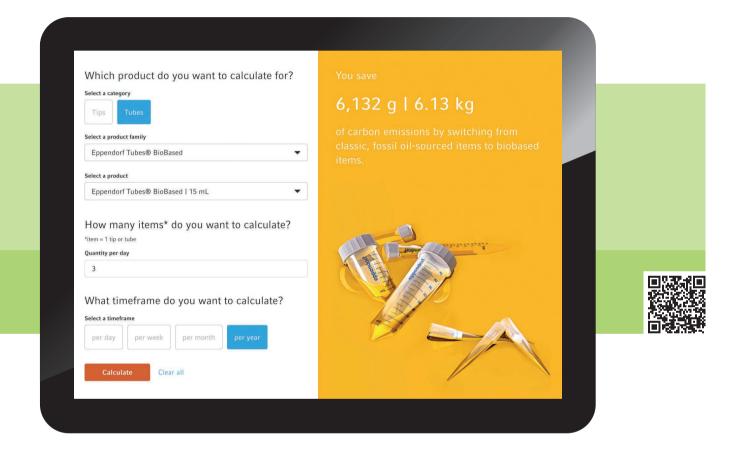
Eppendorf Deepwell Plates BioBased	Purity	Variants	Packaging	Order no.
White	PCR clean and proteinfree	2,000 μL, 96 wells	Resealable Bags	0030501012
Spring green	PCR clean and proteinfree	2,000 μL, 96 wells	Resealable Bags	0030501020

<sup>\*</sup> Pyrogen-, Dnase-, Rnase-, DNA-free



## How Much CO<sub>2</sub> Can You Save?

When switching to biobased laboratory consumables you can reduce your daily carbon emissions easily.



Your local distributor: www.eppendorf.com/contact Eppendorf SE  $\cdot$  Barkhausenweg 1  $\cdot$  22339 Hamburg  $\cdot$  Germany eppendorf@eppendorf.com  $\cdot$  www.eppendorf.com

#### www.eppendorf.com/BioBased

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