Environmental concerns, but you Get Green with Starlab.

You are passionate for science.

OUR GREEN MISSION





A company with a mission.

OUR GREEN MISSION

When you take one step forward in the lab, you should not have to take two steps back where environmental protection is concerned. Only when scientific progress is also sustainable, will it unfold long-term benefits for all of us in terms of climate issues.

That's why Starlab have been thinking about sustainability for some time, with long-term corporate planning and durable products. We have already succeeded in saving plastic with our TipOne® pipette tip system, and our journey to make pipetting more sustainable still continues. However, the truth is that we all still have a long way to go towards a fully sustainable laboratory.

For you and for our planet, our mission is to continually look for intelligent, climate friendly products and processes. Together with you, we will strive to achieve our goal of becoming a thoroughly green company. Our promise along the way: to continue to take steps wherever we can - large or small - to reduce our environmental impact, and help our customers to do the same.

"We need to take responsibility. It requires self-reflection, engagement and the will to make a change for a sustainable future. In our business we need to constantly look for and provide better solutions that direct us to take the next step for being a role model in our industry."

Klaus Ambos CEO Starlab International



OUR ARTICLES AND PODCASTS

In our newsroom, we have a library of interesting articles covering sustainability in the lab, on topics such as water usage, energy consumption, and how what you buy and use in the lab matters. You will find our podcasts here too!



MORE INFO



Being green, behind the scenes.







SALES TEAM

Promotes TipOne® refills to customers as the plastic-saving and economical alternative to racked tips. Provides free empty racks for refill users. Help customers rationalise product inventory for efficient ordering. Undertakes MGL Green Ambassador Course as part of their training.



SERVICING LABORATORY

MARKETING

solutions.

Digital first is our mantra!

Reduced printed material

and increased digital

Paperless systems with calibration certificates provided in pdf format.
Car sharing or use of public transport to on-site clinics where possible.
Reusable mailing boxes provided for sending your pipettes to our labs for servicing.

WAREHOUSE

Reuse cardboard boxes where possible. Plastic padding has been replaced with 100% biodegradable paper packing. All waste (cardboard, pallets etc) is recycled. Warehouse lighting replaced with energy-saving lamps.



CUSTOMER SERVICE

A 100% paperless office might be an unrealistic goal but we are nearly there!

We regularly review and audit internal administrative processes and have digitised nearly all processes to reduce paper use to an absolute minimum.



CARBON OFF-SET DELIVERIES

All deliveries of product to customers undertaken by UPS courier service are carbon off-set.



Get Green with Starlab.

PURCHASING

Product is purchased for the whole Starlab

group to

ensure efficient

transportation.

The TipOne® journey to closing the recycling loop...

10 YEARS IN THE MAKING

TipOne® made its debut in 1998 as an innovative pipette tip system aimed at reducing plastic waste with its easy to use refill and reusable racks. Recognising the potential for improvement, a significant redesign took place in 2015 with focus on two key objectives: to minimise overall plastic use while maintaining quality and, to improve recyclability and thus advance efforts towards a closed-loop recycling system.

In 2021, Starlab formed a partnership with recycling experts REMONDIS. In January 2025, with the start of the move of TipOne® manufacturing from the USA to Germany, we were finally able to reach our goal, and started using the recycled TipOne® plastic. Recycled TipOne® PP from our recycling service is now being used in Germany to make more TipOne® products. This means we have successfully closed the recycling loop!



Improved recyclability

was also a main focus. All system components now made from polypropylene (PP) and contain no paper labels. This makes it easier to recycle, and means that as only high-quality PP is collected, only high-quality PP recyclate is produced. This was an important step towards being able to close the material loop.

2021: TipOne® recycling service in partnership with REMONDIS begins. The TipOne® plastic returned by our customers is processed by REMONDIS in Germany, but unlike an open-loop recycling system where material is downcycled and sold on for other uses or for other products, ownership of the recyclate remains with Starlab, the quality is maintained and the material kept within the production cycle.



Why less is more with TipOne®.

REDUCE

USE OF NATURAL RESOURCES

Reusing recycled plastic reduces the need to extract new, raw materials from the earth and protects natural resources.

100 % **RECYCLED PLASTIC**

The clear, system components (top & bottom shells and spacers) on all refills made in both USA & Germany are made from 100% recycled plastic1).

RECYCLED PLASTIC

From July 2024, the base of all TipOne® racks made in USA include 25% recycled plastic1).



~75% TipOne® RECYCLED **PLASTIC**

From January 2025, the base and lid of TipOne® racks produced in Germany are made entirely with recycled plastic. The material used for the base includes ~75% post-consumer recyclate collected by our customers using our TipOne® recycling service.

REFILL

TO SAVE PLASTIC USE

63%

PLASTIC SAVED

when using a sterile refill compared to using the racked equivalent on tip volumes 10 to 300 µl. 53 % plastic saved for tip volumes 1000 and 1250 µl.

807 g

PLASTIC SAVED

when using the 1250 ul refill compared to racked equivalent. (466 g for 10 µl; 546g for 200/300 µl and 737g for 1000 µl.) All savings quoted per 960 tips.

REUSE

THE RACKS AGAIN & AGAIN

AUTOCLAVE CYCLES

TipOne® racks are designed to be reused. We have tested them: they can withstand at least 100 autoclave cycles (with wafers inserted) without any loss of shape or quality.

RECYCLE

THE FIRST, CLOSED-LOOP RECYCLING SERVICE FOR LABS

WHAT IS CLOSED-LOOP RECYCLING?

Closed-loop recycling is a sustainable process that allows TipOne® plastic to be recycled and reused for more TipOne® products. One of the benefits of a closed-loop system is that the polypropylene is kept within the production cycle for as long as possible, thus creating a sustainable cycle of material for use-a circular economy—that increasingly reduces the need for new, virgin materials.

SECOND

Buy your tips by the case, and reuse the case carton to send us your TipOne® polypropylene for recycling. We will recycle the box, as well as the plastic!



~117 t

PLASTIC COLLECTED

By Jan 2025, approx. 117 tonnes of reground TipOne® plastic had been collected - thus avoiding the need to source ~117 t of virgin PP, and eliminating the associated greenhouse gas (GHG) emissions of raw materials extraction. **100**% **OF YOUR**

RECYCLING **WILL BE REUSED**

Starlab guarantees that 100 % of the TipOne® polypropylene returned will be recycled and reused.

ZERO **OTHER MATERIAL**

TipOne® system components are made entirely from recyclable polypropylene (PP) and contain no labels or other materials to contaminate the recyclate, and makes the recycling process for users quick and easy.

RECYCLABLE CARDBOARD

Pack and case cartons for all TipOne® products are made from recycled and recyclable cardboard.



TipOne® recycling service.

WHAT CAN BE RECYCLED?

All polypropylene (PP) components of the TipOne® system can be collected for recycling via the Starlab TipOne® recycling service.

Please only return clean, non-contaminated TipOne® components, and no tips!



Rack: base, lid, tip wafer
Refils: Top & bottom shells, spacers, tip wafer

Stack Rack: base, frame, lid, tip wafer

All plastic TipOne® system components, excluding tips, the bag used for loose tip and the shrink wrap, can be returned for recycling

in Germany are made

using 75 % TipOne®

recyclate

further and reused

to make more

TipOne® products



WHAT HAPPENS TO MY RECYCLING?



SEE OUR CLOSED-LOOP RECYCLING VIDEO

recycling and

arrange a collection



crushing of the TipOne® plastic. The shredded

material is then processed into plastic granulate

WATCH VIDEO

HOW THE SERVICE WORKS

It's easy to use! Collect the recycling, go online to organise a collection, and a courier will come in and pick it up.

The convenient service allows you to organise the regularity of collections to suit your lab's needs.

JOIN US!

Starlab's closed-loop recycling service is available to all TipOne® customers located in Austria, France, Germany, Italy and the UK.

To join, you can sign up here: www.starlab.click/recycling-de



The TipOne® recycling process.

FOR CUSTOMERS IN GERMANY AND AUSTRIA



REGISTER

You must register before you can use the service. Click here:

REGISTRATION FORM

or go to: starlab.click/recycling-DE

- Contact your Sales Representative or Customer Services if you need help
- Email the completed form to: info@starlab.de
- We will set up your details on our Recycling Collection Portal
- You will recieve an email with your personal log-in details. (This may take up to 5 working days)

1 BUY

9

Once you're registered, you can start collecting for recycling!

- First, you must buy your racked or refill tips by the case, but don't worry—it's both cheaper and greener!
- Why do you need to do this? So you can reuse the outer case box to store and send back your recycling. Now that is clever!



You can easily spot our case Article Nos. as they all end with **-C**

TipOne
ONLY!

Refills

Racks

Tips
be cor
or aur

TipOne® polypropylene packaging



Tips cannot be recycled. All recycling must be contamination free and contain no labelling or autoclave tape. TipOne® plastic only please!

When your TipOne® case is filled with recycling, you can arrange collection.

3)

ARRANGE

COLLECTION

Collections are arranged via our:

RECYCLING COLLECTION PORTAL

https://login.remondis-recycling.de/versandlabel

- Log-in using your personal log-in details
- To print a returns label, click on the "Download Shipping Label" icon
- Confirm the recycling is free from contamination
- Confirm Data Protection Regulations
- Print a separate label for each box to be shipped

4

WAVE GOODBYE

Prepare your recycling for collection:

- Seal the box and contents securely
- Affix the returns label
- Leave the box in the same area where parcels are usually collected by couriers
- Your recycling will be collected by UPS or DHL Express, and taken to our recyling partner for processing

5

REPEAT

Repeat steps 1 to 4

 And continue to Reduce, Reuse, Refill and Recycle with Starlab TipOne®

MORE INFO

starlab.click/recycling-DE



Tips for greening your lab.

REDUCE AND REUSE

When it comes to plastic waste in the lab, it's obviously good to recycle what you can, but two other important considerations are to REDUCE the amount of plastic coming into your lab in the first place, and second, to REUSE whatever you can.

This is where TipOne® comes into its own – when using our refill systems, you do both! You reduce the amount of new plastic coming into your lab AND you are reusing TipOne® racks at the same time.

The tables show the amount of plastic saved with every pack of refills compared to pre-racked tips. Calculate how many you tips you get through in a day, a week or a year, to see how much plastic you can save!

PLASTIC SAVED PER PACK OF REFILLS VS PER PACK OF RACKED TIPS

Tip volume	Per pack (960 tips)	
10 μl & 10/20 μl XL	466 g	
200 μl	546 g	
300 μl	546 g	
1000 μl	737 g	
1250 µl XL	807 g	

PLASTIC SAVED PER PACK OF STERILE REFILLS VS PER PACK OF STERILE RACKED TIPS

Tip volume	Per pack (960 tips)
10 μl & 10/20 μl XL	370 g
200 μl	370 g
300 μl	370 g
1000 μl	475 g
1250 µl XL	475 g



BUY IN BULK

Buy by the case (Starlab Article Nos ending with -C). It's greener, cheaper, and saves on both transport emissions and packing materials. If you buy TipOne® tips by the case, you can reuse the outer box to send back your recycling!

We can provide certificates of recycling showing how much recycling



you have returned. Useful info if your lab is going for lab certification, or for use on internal audits. Contact your Account Manager.



REUSE TIPONE® RACKS FOR MORE THAN JUST TIP REFILLS

Empty TipOne® racks are ideal for the storage of tubes, caps and other small items, to help keep your bench or hood tidy and organised. They can also be used to hold tubes and other small items for autoclaving. The racks can be autoclaved over and again, and can stack on top of one another to optimise space in your autocalve too!



Tips for greening your lab.



THINK BEFORE YOU AUTOCLAVE!

Many products are already certified and do not require autoclaving—nine times out ten they probably don't even need to be autoclaved. To save on energy and water, only autoclave when necessary and ensure the autoclave is full.



BE GOOD, CLOSE THE HOOD!

Close the fume hood sash when not in use; this can drastically reduce energy use. Keeping the hood tidy can also save on energy. Storing too much in the hood may block the airflow which means the unit has to work harder and therfore, consume more energy.



FREEZER MANAGEMENT!

Set ultra low freezers to -70 °C rather than -80 °C: this won't compromise the sample's integrity (always test run with unimportant samples first!) but will save a lot of energy. Defrost regularly to avoid using more energy when loaded with ice. Discard old samples so freezer space is not wasted, and optimise freezer space with sample storage boxes for efficient energy use.



See our infosheet for more info!



MORE INFO

starlab.click/newsroom

See our NEWSROOM for more tips and articles on lab sustainability



GOING FOR LEAF?

Find out which Starlab products can help your lab achieve bronze, silver or gold certification.



www.starlab.click/leaf



CREATE A GREEN LAB GROUP

Get together with like-minded people in your lab to identify where improvements can be made. Meet with other labs in your institute to swap and share ideas (and empty TipOne® racks!).



More than just tips...

OUR OTHER 'GREEN' PRODUCTS



ErgoOne® PIPETTES

When we think about sustainability, we don't usually think about the pipettes we use. Regular pipette maintenance also contributes to the total plastic waste generated by labs. Pipette spares require raw materials, manufacturing and shipping the same as any other product. Many pipettes have a seal and o-ring with the usual recommendation of annual replacement. ErgoOne® pipettes have a greased system so there is no seal and o-ring to replace. Also, the steel tip cones on ErgoOne® micro models will help reduce the likelihood of breaks and damage often associated with small volume tip cones, further reducing the need for spare parts.



FREEZER RACKING

Optimise the space in your freezer with freezer racking to cut energy use. Optimising storage space in the freezer decreases the space where air can get in when the door is open, which minimises frost build up. Using racks can provide easier access to your samples which will limit door opening times, so less energy is needed to get back to temperature. Efficiently using the space in your freezer could even reduce the number of freezers your lab needs. Starlab's range of highquality freezer racking is made in Germany with 85% recycled stainless steel, in a factory powered with 100% sustainable energy. Sustainability has never been so cool!



StarGuard® GLOVES

Starlab is reducing our use of natural resources and cutting transport emissions with our StarGuard® range of gloves. Gloves are shipped direct from manufacturing to our warehouse, and shipped in containers without pallets to maximise the quantity of gloves per shipment. Comfort and Sensitive gloves are sold in boxes of 250 and 200 gloves respectively. Shipping and storing more gloves in the same size box as the usual 100 gloves, saves both transport emission and packaging materials.



GuardOne®

GuardOne® workstations were designed with sustainability in mind. Units are flat packed to reduce packaging volume and allow more units to be shipped per pallet. GuardOne® features the latest fan technology and energy-saving LED lighting to provide one of the lowest power consumptions on the market. Long-life consumables (such as the UV lamp) also prevent the cost and waste associated with frequent replacement. Have you ever thought about the cost of a failed PCR? GuardOne® will help protect your samples from crosscontamination and could prevent the time and cost of the extra consumables needed when having to duplicate experiments.



5.0 ml TUBES

Reduce plastic use!
5.0 ml tubes are ideal for
those times when 2.0 ml
tubes are too small but
15 ml tubes are too big.
They can also reduce the
amount of space taken up
in your freezer so you can
store more samples.

GO TO PRODUCTS

www.starlab.click/green-products



The Starlab Green Team.

THE STARLAB GREEN TEAM

The Green Team comprises members across the Starlab Group. Green Team members are passionate about sustainability and green issues; their role is to research, identify and share ideas for sustainability and improvement, in terms of our products and our internal processes, and to galvanise sustainability initiatives with colleagues, customers or the wider community.

If you would like to discuss ways of making your lab greener, or you have a suggestion on how we can help you to reach your own sustainability goals, please let us know. Starlab loves to take a consultative approach, and Green Team members or the Starlab Green Officer can meet with individuals or sustainability groups to discuss ideas, hear suggestions and see how we can help you.

Please contact your Account Manager or a member of the Green Team.

Together, we can build a greener future in the lab!



GREEN TEAM



Florian.Linz@starlab.de Stefan.Stutz@starlab.de



Francis.Parker@starlab.co.uk Mandy.Hutson@starlab.co.uk Vanessa.Whight@starlab.co.uk



Antoine. Escourrou@starlab.fr Olivier. Zuriguel@starlab.fr



Alessandro.Ferrarini@starlab.it Silvia.Angelucci@starlab.it



Environmental concerns, but you Get Green with Starlab.

You are passionate for science.

"It is important to focus on what drives us: passion. Our message "You are passionate for science" highlights the passion in our commitment to science. Starlab supports scientists by nurturing their passion. We believe that our combination of scientific excellence and environmental awareness enables us to find solutions to the challenges of tomorrow."

Klaus Ambos, CEO Starlab International



T: +49 (0)40 675 99 39 0 info@starlab.de

www.starlab.de



