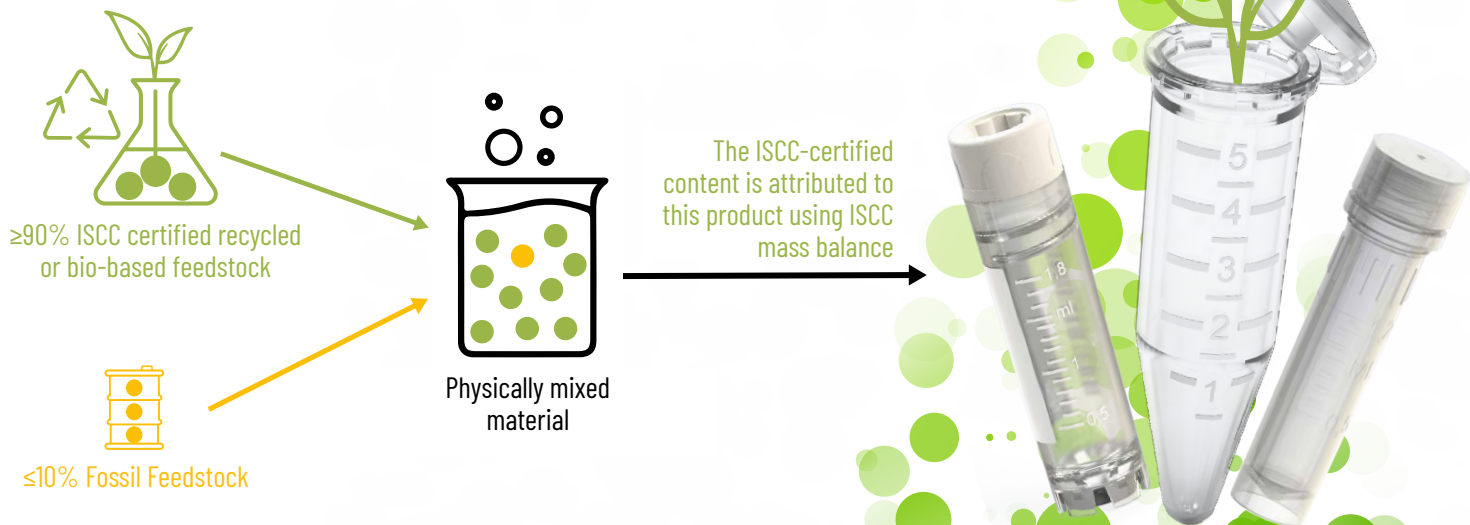




Biosigma

Dutscher group

BIOBased CLEARLine® products



Embrace **Transparent Sustainability** with **BIOBased CLEARLine®** products



Made of certified raw materials based on renewable feedstock



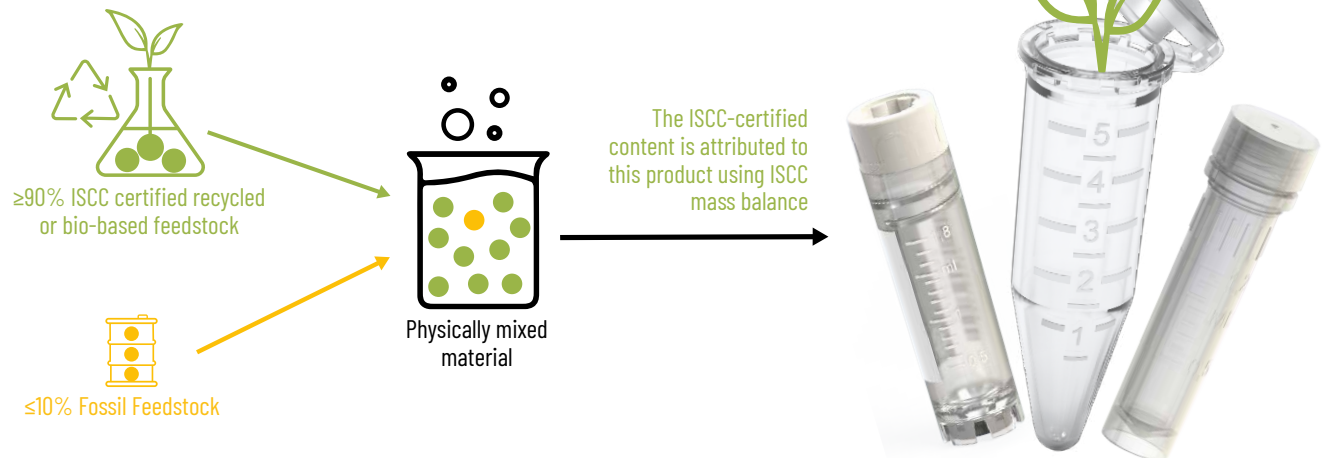
Third-party verified information environmental impact

BIOBased CLEARLine® products

Conventional plastics, especially those from non-renewable sources, pose a challenge to the environment due to their limited biodegradability. Laboratories can mitigate their impact by integrating bio-based materials and adopting environmentally-friendly practices that minimize their plastic footprint.

Biosigma, committed to innovation and sustainability, has embraced the Mass Balance Model, integrating circular feedstocks into its production facilities.

As a pioneer in innovation, Biosigma introduces the **BIOBased CLEARLine®** products, which are manufactured with at least 90% certified plastic from bio-based raw materials.



During this process, the properties of the polymer and the product remain compliant with the existing specifications. Such a sustainable approach not only preserves product integrity, but also contributes to significant emission savings, in line with our commitment to a greener future.

The commitment to sustainability is also evident in the choice of feedstocks, which are derived from renewable sources such as agricultural residues, food waste, and other organic by-products. These materials are not only environmentally friendly, but also have **ISCC Plus certification** as Bio and Bio-circular products. The sustainability criteria and the entire process are certified by the International Sustainability and Carbon Certification (ISCC) organization.



"ISCC - International Sustainability and Carbon Certification (ISCC) is an independent certification system that ensures compliance with high environmental and social sustainability requirements, the reduction of greenhouse gas emissions and traceability throughout the supply chain."

In addition, all **BIOBased CLEARLine®** products have the ACT Environmental Impact Factor Label awarded by an independent auditor and published by My Green Lab® <https://act.mygreenlab.org/>

The ACT (Accountability, Consistency, and Transparency) label provides clear, accurate, fair, and greenwash-free information on environmental impact in all areas, including manufacturing, energy and water use, packaging, and end-of-life.

Environmental Impact Scale	
Decreasing Environmental Impact	
1	10
Manufacturing	
Manufacturing Impact Reduction	3.0
Renewable Energy Use	Yes
Responsible Chemical Management	1.0
Shipping Impact	1.0
Product Content	1.0
Packaging Content	1.0
User Impact	
Energy Consumption (kWh/day)	N/A
Water Consumption (liters/day)	N/A
Product Lifetime	5.0
End of Life	
Packaging	5.0
Product	7.3
Innovation	
Innovative Practices	-1.0
Environmental Impact Factor:	23.3
Label Valid Through:	December 2025

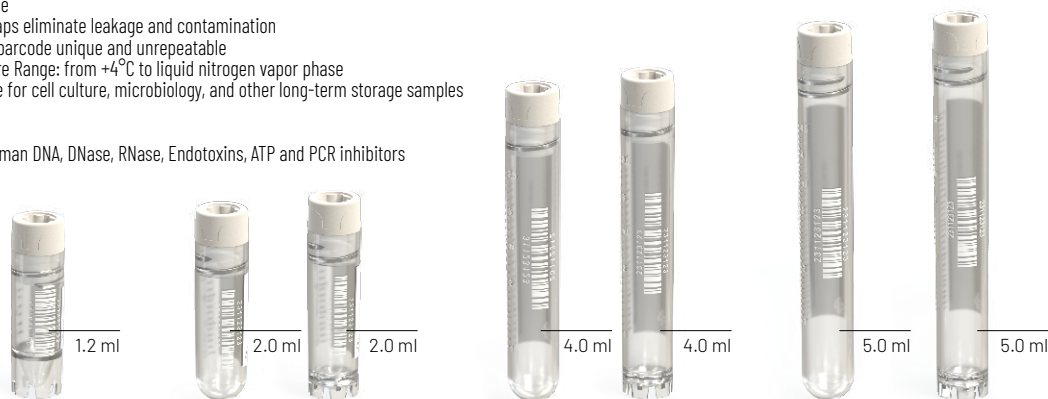
BIOBased 1D CryoGen® Tubes CLEARLine®

CLEARLine®
"Be cool, be safe, be CLEARLine®"



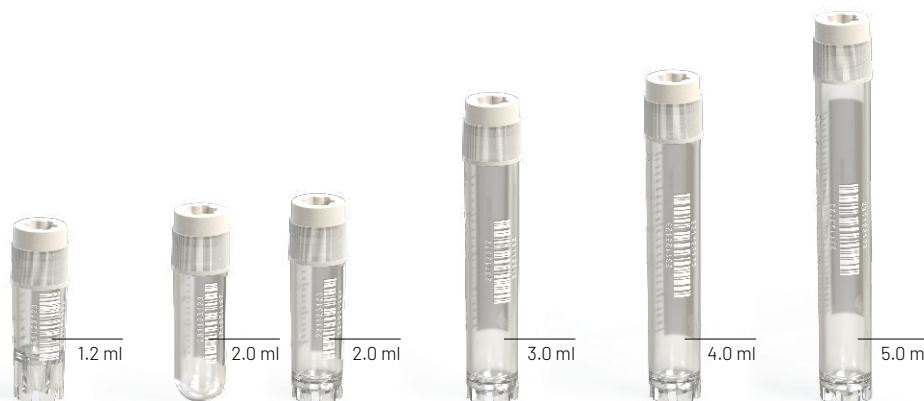
- Tubes in Polypropylene - caps in Polypropylene and TPV, from medical grade raw materials
- Zip bags, re-closable
- Innovative screw caps eliminate leakage and contamination
- Standard code 128 barcode unique and unrepeatable
- Storage temperature Range: from +4°C to liquid nitrogen vapor phase
- Particularly suitable for cell culture, microbiology, and other long-term storage samples
- Sterile SAL 10-6
- Certified IATA PI650
- Certified free of Human DNA, DNase, RNase, Endotoxins, ATP and PCR inhibitors

* Certificate of analysis and Certificate of validated Beta rays treatment are available for download on www.biosigma.com



Internal Thread cap

CAT. NO.	VOL. (ML)	MODEL	BOTTOM STYLE	HEIGHT (MM)	DIAMETER (MM)	INTERNAL PACKAGING	SALE UNIT
CL1BISC	1.2	1D	SELF STANDING	H 42.50 ± 0.34	Ø 12.6 ± 0.13	BAG / 50	CASE / 500
CL2BISC	2.0	1D	SELF STANDING	H 47.70 ± 0.34	Ø 12.6 ± 0.13	BAG / 50	CASE / 500
CL2ISC	2.0	1D	ROUND BOTTOM	H 46.55 ± 0.34	Ø 12.6 ± 0.13	BAG / 50	CASE / 500
CL4BISC	4.0	1D	SELF STANDING	H 76.70 ± 0.44	Ø 12.6 ± 0.13	BAG / 50	CASE / 500
CL4ISC	4.0	1D	ROUND BOTTOM	H 75.55 ± 0.44	Ø 12.6 ± 0.13	BAG / 50	CASE / 500
CL5ISC	5.0	1D	SELF STANDING	H 90 ± 0.44	Ø 12.6 ± 0.13	BAG / 50	CASE / 500
CLBISC	5.0	1D	SELF STANDING	H 89.25 ± 0.44	Ø 12.6 ± 0.13	BAG / 50	CASE / 500



External Thread cap

CAT. NO.	VOL. (ML)	MODEL	BOTTOM STYLE	HEIGHT (MM)	DIAMETER (MM)	INTERNAL PACKAGING	SALE UNIT
CL1BESC	1.2	1D	SELF STANDING	H 41.25 ± 0.34	Ø 12.6 ± 0.13	BAG / 50	CASE / 500
CL2BESC	2.0	1D	SELF STANDING	H 46.85 ± 0.34	Ø 12.6 ± 0.13	BAG / 50	CASE / 500
CL2ESC	2.0	1D	ROUND BOTTOM	H 45.90 ± 0.34	Ø 12.6 ± 0.13	BAG / 50	CASE / 500
CL3BESC	3.0	1D	SELF STANDING	H 70.65 ± 0.44	Ø 12.6 ± 0.13	BAG / 50	CASE / 500
CL4BESC	4.0	1D	SELF STANDING	H 75.45 ± 0.44	Ø 12.6 ± 0.13	BAG / 50	CASE / 500
CL5BESC	5.0	1D	SELF STANDING	H 89.25 ± 0.44	Ø 12.6 ± 0.13	BAG / 50	CASE / 500

BIOBased 2D CryoGen® Tubes CLEARLine®

CLEARLine®
"Be cool, be safe, be CLEARLine®"



- Datamatrix Code inserted in the bottom, sequential and corresponding to the "Code 128" on the tube's body



Internal Thread

External Thread

CAT. NO.	VOL. (ML)	MODEL	BOTTOM STYLE	HEIGHT (MM)	DIAMETER (MM)	INTERNAL PACKAGING	SALE UNIT
CL2B12DSC	2.0	2D	SELF STANDING	47.70 ± 0.34	Ø 12.6 ± 0.13	BAG / 50	CASE / 500
CL5B12DSC	5.0	2D	SELF STANDING	90 ± 0.44	Ø 12.6 ± 0.13	BAG / 50	CASE / 500
CL2BE2DSC	2.0	2D	SELF STANDING	47 ± 0.34	Ø 12.6 ± 0.13	BAG / 50	CASE / 500
CL5BE2DSC	5.0	2D	SELF STANDING	89.25 ± 0.44	Ø 12.6 ± 0.13	BAG / 50	CASE / 500

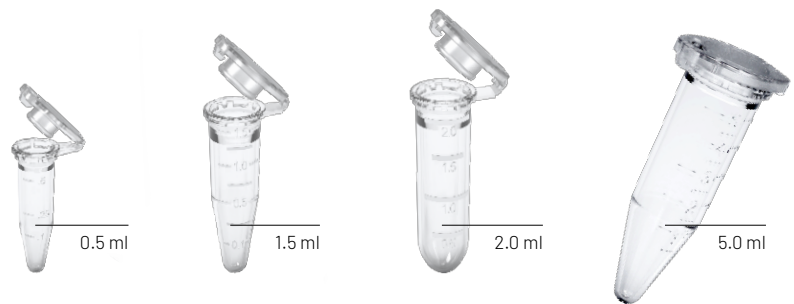
BIOBased CLEARLock™ microtubes CLEARLine® 0.5, 1.5, 2 and 5 ml

CLEARLine®
"Be cool, be safe, be CLEARLine"

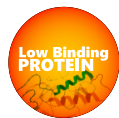


- In Polypropylene Medical Grade, Non-Cytotoxic - Non-Hemolytic
- Zip bags, re-closable
- Optimal transparency
- Graduated with writing area
- Hinged lid prevents any unintentional opening during use and avoid evaporation during long-term storage
- Pierceable writing cap
- Temperature range: -80°C + 100°C
- Centrifugation up to 30,000 x g
- Autoclavable at +121°C for 20 minutes
- Recommended for PCR and other molecular biology applications - chemical and biological sample storage
- Certified free of Human DNA, DNase, RNase, Endotoxins, ATP and PCR inhibitors

*Certificate of analysis available for download on www.biosigma.com



CAT. NO.	COLOR	MODEL	VOLUME (ML)	INTERNAL PACKAGING	SALE UNIT
CL05SC	NEUTRAL	-	0.5	BAG / 500	CASE / 500
CL15SC	NEUTRAL	-	1.5	BAG / 500	CASE / 1000
CL20SC	NEUTRAL	-	2.0	BAG / 500	CASE / 1000
CL50SC	NEUTRAL	-	5.0	BAG / 100	CASE / 200



CLEARlock Low binding:

Maximum Nucleic Acid and Protein recovery rates

CAT. NO.	COLOR	MODEL	VOLUME (ML)	INTERNAL PACKAGING	SALE UNIT
CL05PLBSC	NEUTRAL	PROTEIN LOW BINDING	0.5	BAG / 100	CASE / 500
CL15PLBSC	NEUTRAL	PROTEIN LOW BINDING	1.5	BAG / 50	CASE / 200
CL20PLBSC	NEUTRAL	PROTEIN LOW BINDING	2.0	BAG / 50	CASE / 200



CLEARlock Low binding:

Maximum Nucleic Acid and Protein recovery rates.

CAT. NO.	COLOR	MODEL	VOLUME (ML)	INTERNAL PACKAGING	SALE UNIT
CL05DLBSC	NEUTRAL	DNA LOW BINDING	0.5	BAG / 100	CASE / 500
CL15DLBSC	NEUTRAL	DNA LOW BINDING	1.5	BAG / 50	CASE / 200
CL20DLBSC	NEUTRAL	DNA LOW BINDING	2.0	BAG / 50	CASE / 200

BIOBased Microtubes Screw Cap CLEARLine® 0.5, 1.5 and 2 ml

CLEARLine®
"Be cool, be safe, be CLEARLine"



- Tubes in Polypropylene - caps in polyethylene from medical grade raw materials
- Available in 3 caps styles and 6 sizes of conical bottom or self-standing tubes (0.5, 1.5 and 2ml)
- Centrifugation up to 25,000 x g
- Temperature range: -85°C + 121°C
- Autoclavable to 121°C for 20 minutes
- Recommended for several biotechnological applications
- Sterile SAL 10-6
- Certified free DNase, RNase, and Endotoxins



CAT. NO.	VOL. (ML)	HEIGHT MM ± 0.34	BOTTOM	O-RING	WRITING AREA	INT. PACK	SALE UNIT
CL604SC	0.5	47.1	CONICAL	X		BAG / 500	CASE / 1000
CL614SC	0.5	47.5	SELF STANDING	X		BAG / 500	CASE / 1000
CL724SC	1.5	47.1	CONICAL	X	X	BAG / 500	CASE / 1000
CL734SC	1.5	47.6	SELF STANDING	X	X	BAG / 500	CASE / 1000
CL744SC	2	47.2	CONICAL	X	X	BAG / 500	CASE / 1000
CL754SC	2	48.6	SELF STANDING	X	X	BAG / 500	CASE / 1000

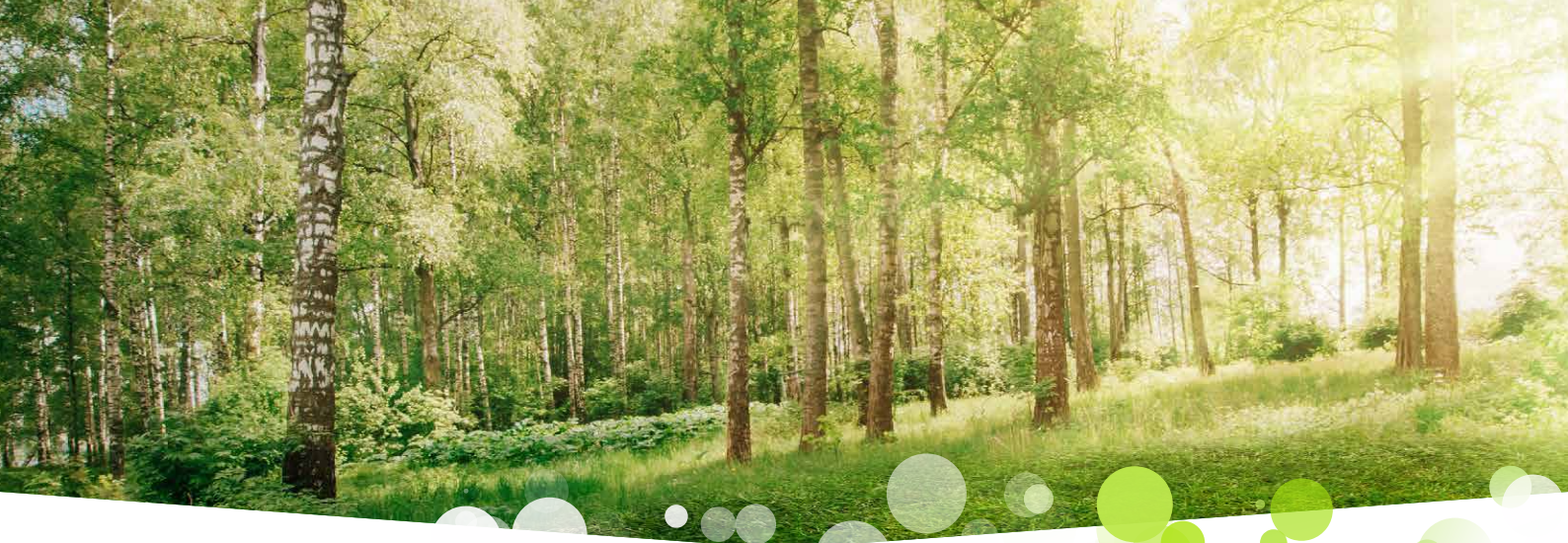
BIOBased CLEARLine® products

ensure...

- ✓ Certified Traceability of the Supply Chain
- ✓ Very limited dependence on non-renewable sources.
- ✓ Reduction of greenhouse gas emissions
- ✓ The Transition to a Green and Circular Economy
- ✓ Same Performance as fossil-derived materials without compromising on quality

✦ **A Conscious Step Towards a Sustainable Future**






Special product highlights

The Biosigma Production Centers in Cona/Italy and Ruzomberok/Slovakia are ISCC PLUS (International Sustainability & Carbon Certification) certified - ACT labelled (Accountability, Consistency, Transparency) - Environmental Impact Factor Certification conducted by My Green Lab® - Tubes* and Microtubes are made from at least 90 % renewable feedstock (recycled e.g. from food oil wastes and residues), applying ISCC mass balance approach.

Identification Feature

On the bag and on the cardboard box you find an informing additional label as follows:

These microtubes are made with 90% bio-based plastic. The plastic can be traced back to biological waste material which is attributed to these microtubes via the ISCC mass balance approach.

By choosing these consumables, our customers help to significantly reduce the amount of fossil resources required for their production.



Biosigma

Dutscher group

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