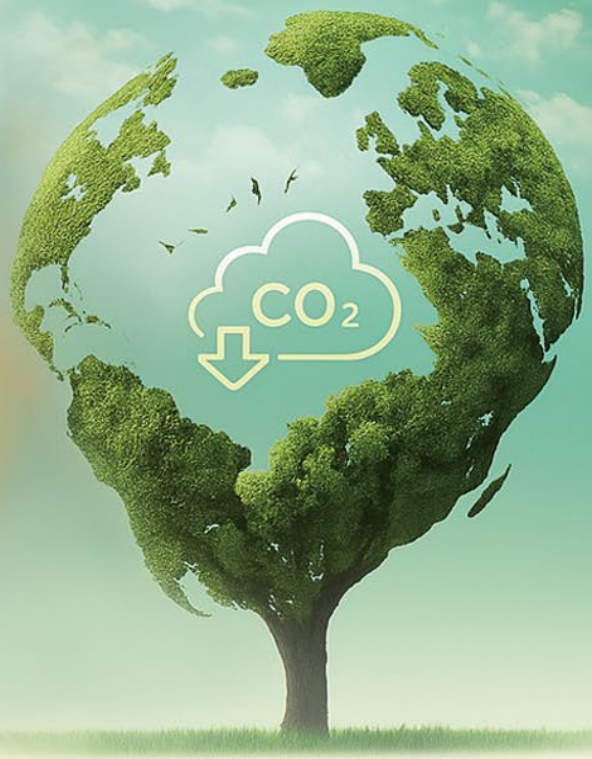
GaleMed

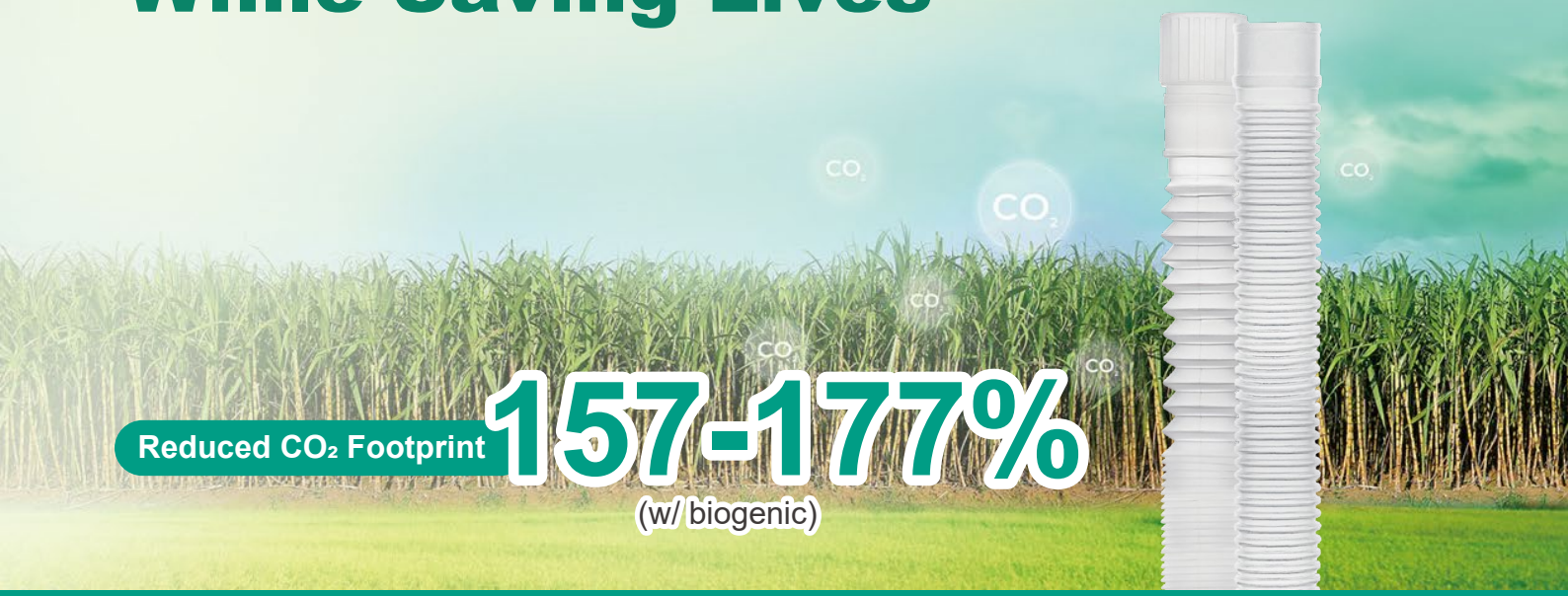
Single-use medical plastics like **breathing circuits** are rarely recycled and mostly incinerated or landfilled, driving CO_2 emissions.

Healthcare accounts for **4.4%** of global emissions, with plastics as a major source[1].

By 2030, plastic-related **CO_2** is expected to reach **1.34 billion tons** - a rising environmental threat[2].



BioVent-Circuit® – The First Sustainable Choice To Reduce CO_2 While Saving Lives



Reduced CO_2 Footprint **157-177%**
(w/ biogenic)

Using OpenLCA 1.11.0 and the -1/+1 approach per ISO 14067 and our supplier's LCA method, we calculated cradle-to-gate carbon footprints (excluding packaging, labeling, and external plastic parts) with and without biogenic carbon credits. All data presented in this brochure are reported based on these assumptions. Specifications are subject to change without prior notice.

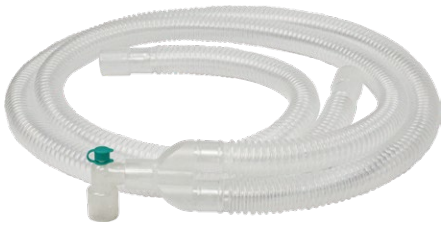
TECHNICAL DATA SHEET

BioVent-Circuit®

Single Use / Non Sterile / Latex Free / DEHP Free

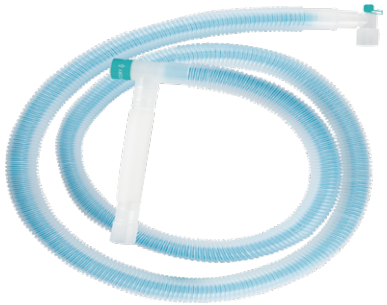
Device Manufacturing Specifications	
Product Family	Disposable Anesthesia Circuit
Classification – EU	Class IIa (MDR Rule 2 indent 1)
CE Mark	0197
EMDN Code	R020101 STANDARD BREATHING CIRCUITS R020102 COAXIAL BREATHING CIRCUITS
Classification – US	Class I
FDA Product Code	CAI
Classification – UK	Class IIa
GMDN Code	37704 - Anesthesia Breathing Circuit, Single-Use
Classification – CH	Class IIa
Usage	Disposable, Single use
Sterility	Non-Sterile, Packaging for non-sterile devices is intended to protect the product from dust and dose not provide a sterile barrier.
Shelf Life	3 years
Storage Conditions	Room Temperature Humidity: 40–60% Relative Humidity

Device Material



Standard Breathing Circuit

Component	Material
L Connector	HDPE
Y Connector	HDPE
22F Hose	EVA+LDPE
S Connector	HDPE
Luer Cap	PE (Fossil Based)



Coaxial Breathing Circuit

Component	Material
L Connector	HDPE
T Connector	HDPE
Inner & Outer Hose	LDPE
Luer Cap	PE (Fossil Based)
22F Collapsible Hose	PP (Fossil Based)

Intended use

The Disposable anesthesia circuit is intended for acting as gas pathway of an anesthetic breathing system between the anesthetic machine and the patient's airway.

Compatibility

BioVent-Circuit are designed to be used in combination with mechanical ventilation or anesthesia machines.

Contraindication

None identified.

Disposable Instructions

Dispose of all materials in accordance with hospital protocols and procedures and all applicable local, state, and federal regulations. Decontaminate and dispose of all potentially biohazardous material.

TECHNICAL DATA SHEET

BioVent-Circuit®

Single Use / Non Sterile / Latex Free / DEHP Free

Standard Breathing Circuit

REF	Patient Population	L Connector	Machine End Port	Length
AB0437	Adult	22M/15F	22F	1.5m
AB0466	Adult	22M/15F, 4.3F	22F	1.2m
AB0467	Adult	22M/15F, 4.3F	22F	1.8m

Coaxial Breathing Circuit

REF	Patient Population	L Connector	Inner Tube	Outer Tube	Exhale Tube (Expandable)	Length
AB0445	Adult	22M/15F ,4.3F	22F	22F	17-40cm	1.8m
AB0468	Adult	22M/15F, 4.3F	22F	22F	17-40cm	1.5m
AB0509	Adult	22M/15F, 4.3F	22F	22F	17-40cm	1.8m
AB0510	Adult	22M/15F, 4.3F	22F	22F	17-40cm	2.0m
AB0511	Adult	22M/15F, 4.3F	22F	22F	17-40cm	2.5m
AB0512	Adult	22M/15F, 4.3F	22F	22F	17-40cm	3.0m

Performance Characteristics

Parameter	Specification
Compliance	<5 ml/cmH_2O@(60±3)cmH_2O
Resistance	<0.06cmH_2O/l/min@30l/min
The tension between hose & connector	>45N@(50±5)mm/min
Leakage	<70ml/min@(60±3)cmH_2O

Quality & Regulatory Compliance

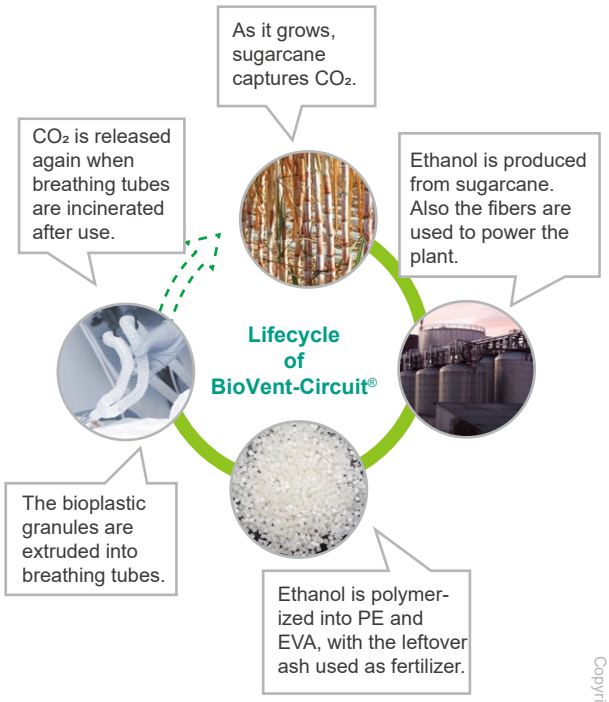
Standard	Description
ISO 5367:2023	Anaesthetic and respiratory equipment — Breathing sets and connectors
ISO 5356-1:2015	Anaesthetic and respiratory equipment — Conical connectors
ISO 10993-5:2009	Biological evaluation of medical devices Part 5: Tests for in vitro cytotoxicity
ISO 10993-10:2021	Biological evaluation of medical devices Part 10: Tests for skin sensitization
ISO 10993-23:2021	Biological evaluation of medical devices Part 23: Tests for irritation
ISO 18562	Biocompatibility evaluation of breathing gas pathways in healthcare applications

BioVent-Circuit®



GaleMed is redefining respiratory care with sustainability in mind.

- ✓ **Demonstrated Carbon Reduction:** Saves up to 1 kg of CO_2 per circuit (based on 1.8m circuit).
- ✓ **Eco-Friendly Materials:** Made from sugarcane-based bioplastic aligned with the biogenic carbon cycle and sourced through an ISCC PLUS certified supply chain supporting material traceability.
- ✓ **Supports Scope 3 Carbon Goals:** Offers hospitals a solution that supports climate action initiatives and sustainability-oriented procurement.
- ✓ **Versatile Clinical Use & Universal Compatibility:** Compatible with a wide range of clinical scenarios and designed to fit standard international connectors.
- ✓ **Single-Patient Use:** Manufactured for single-patient use and tested for biocompatibility in accordance with ISO 10993.



Order Information

Standard Breathing Circuit

REF	Description	QTY
AB0437	Anesthesia Circuit, Adult, 1.5m	1 pc/pkg, 15 pcs/ctn
AB0466	Anesthesia Circuit, Adult, 1.2m	1 pc/pkg, 15 pcs/ctn
AB0467	Anesthesia Circuit, Adult, 1.8m	1 pc/pkg, 15 pcs/ctn

Coaxial Breathing Circuit

REF	Description	QTY
AB0445	Coaxial Circuit, Adult, 1.8m	1 pc/pkg, 15 pcs/ctn
AB0468	Coaxial Circuit, Adult, 1.5m	1 pc/pkg, 15 pcs/ctn
AB0509	Coaxial Circuit, Adult, 1.8m	1 pc/pkg, 15 pcs/ctn
AB0510	Coaxial Circuit, Adult, 2.0m	1 pc/pkg, 15 pcs/ctn
AB0511	Coaxial Circuit, Adult, 2.5m	1 pc/pkg, 15 pcs/ctn
AB0512	Coaxial Circuit, Adult, 3.0m	1 pc/pkg, 15 pcs/ctn

*Additional specifications and lengths coming soon. Contact sales@galemed.com for details.

Copyright © 2025 GaleMed Corporation. All Rights Reserved

GM-DM-AB-2622

GaleMed®

www.galemed.com

International Sales HQ
GaleMed Corporation
5F., No. 209, Sec. 1, Fuxing S. Road. Taipei City 106, Taiwan
Tel: +886 2-8791-9348 sales@galemed.com

Manufacturer
GaleMed (Xiamen) Co., Ltd.
Xiamen Area of China (Fujian) Pilot Free Trade Zone, 39, Section 3, Haijing East Road 361026 Fujian Province, China
Tel: +86 592-6880588

Specifications are subject to change without prior notice.

1. HEALTH CARE'S CLIMATE FOOTPRINT BY HEALTH CARE WITHOUT HARM.
2. Borgstein EH, Wade F, McCulloch M. Sustainable healthcare systems: A socio-technical perspective on healthcare decarbonization. J Clean Prod. 2020;261:120138. doi:10.1016/j.jclepro.2020.120138