Anesthesia Product Information: COVID-19
April 2020

Medisorb™ CO2 absorbent

Medisorb™ CO2 absorbent products have been specified for use with and validated for optimal performance with GE Healthcare anesthesia systems.

Cat. no.: M1173310 M1173311
For use with with Aespire™, Avance™, Aisys™ and ADU™
M1173310 Medisorb™ multi-absorber original, with white to violet color change
M1173311 Medisorb™ multi-absorber EF, lower alkaline, lower pH, white to violet color change

Key Reminders

- Medisorb™ CO2 Absorbent products may be used with air and oxygen.
- Because the intensity of the Medisorb™ CO2 Absorbent products color change may vary from one procedure to another, always use proximal / end-tidal carbon dioxide monitoring to determine when to change the Medisorb™ CO2 Absorbent product.
- Dispose saturated Medisorb™ CO2 Absorbent products immediately after use prevents their mistaken re-use.
- Excessive use of oxygen flows induces dehydration of Medisorb™ CO2 Absorbent products and inhibits their ability to absorb carbon dioxide.
- Higher than normal minute ventilation may significantly reduce the amount of time the Medisorb™ CO2 is effective.

RISKS

- During use, continuously monitor the patient to ensure that the filters absorbing carbon dioxide do not become saturated, which could potentially lead to the patient rebreathing carbon dioxide that could result in patient death.
- Anesthesia machines and Vyaire supplies are equipment that support and sustain life. If this equipment is not used properly in accordance with instructions and continuously monitored by trained health care professionals, a risk of serious injury or death can occur.
- Risks are related to any use of Medisorb™ CO2 Absorbent products other than that for which they are indicated. Clinicians considering such use during the COVID-19 pandemic must weigh the risks and benefits and ensure proper training and safe handling of the products.

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Medisorb™ CO2 absorbent
Medisorb™ CO2 absorbent products have been specified for use with and validated for optimal performance with GE Healthcare anesthesia systems.

Cat. no.: 2079796-001 2079797-001
For use with Carestation™ 600 series
2079796-001 Medisorb™ EX, original, white to violet color change
2079797-001 Medisorb™ EF EX, lower alkaline, lower pH, white to violet color change

Key Reminders

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- Dispose saturated Medisorb™ CO2 Absorbent products immediately after use prevents their mistaken re-use.
- Excessive use of oxygen flows induces dehydration of Medisorb™ CO2 Absorbent products and inhibits their ability to absorb carbon dioxide.
- Higher than normal minute ventilation may significantly reduce the amount of time the Medisorb™ CO2 is effective.

RISKS

- During use, continuously monitor the patient to ensure that the filters absorbing carbon dioxide do not become saturated, which could potentially lead to the patient rebreathing carbon dioxide that could result in patient death.
- Anesthesia machines and Vyaire supplies are equipment that support and sustain life. If this equipment is not used properly in accordance with instructions and continuously monitored by trained health care professionals, a risk of serious injury or death can occur.
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Medisorb™ CO2 absorbent
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Cat. no.: 8570043
Loose fill
8570043 Medisorb™ twin pack, original, loose fill, white to violet color change

Key Reminders

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- Dispose saturated Medisorb™ CO2 Absorbent products immediately after use prevents their mistaken re-use.
- Excessive use of oxygen flows induces dehydration of Medisorb™ CO2 Absorbent products and inhibits their ability to absorb carbon dioxide.
- Higher than normal minute ventilation may significantly reduce the amount of time the Medisorb™ CO2 is effective.

RISKS

- During use, continuously monitor the patient to ensure that the filters absorbing carbon dioxide do not become saturated, which could potentially lead to the patient rebreathing carbon dioxide that could result in patient death.
- Anesthesia machines and Vyaire supplies are equipment that support and sustain life. If this equipment is not used properly in accordance with instructions and continuously monitored by trained health care professionals, a risk of serious injury or death can occur.
- Risks are related to any use of Medisorb™ CO2 Absorbent products other than that for which they are indicated. Clinicians considering such use during the COVID-19 pandemic must weigh the risks and benefits and ensure proper training and safe handling of the products.

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Medisorb™ CO2 absorbent
Medisorb™ CO2 absorbent products have been specified for use with and validated for optimal performance with GE Healthcare anesthesia systems.

Cat. no.: 427000100
For use with Aestiva™
427000100 Medisorb™ pre-packed cartridge, original, white to violet

Key Reminders

- Medisorb™ CO2 Absorbent products may be used with air and oxygen.
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- Dispose saturated Medisorb™ CO2 Absorbent products immediately after use prevents their mistaken re-use.
- Excessive use of oxygen flows induces dehydration of Medisorb™ CO2 Absorbent products and inhibits their ability to absorb carbon dioxide.
- Higher than normal minute ventilation may significantly reduce the amount of time the Medisorb™ CO2 is effective.

RISKS

- During use, continuously monitor the patient to ensure that the filters absorbing carbon dioxide do not become saturated, which could potentially lead to the patient rebreathing carbon dioxide that could result in patient death.
- Anesthesia machines and Vyaire supplies are equipment that support and sustain life. If this equipment is not used properly in accordance with instructions and continuously monitored by trained health care professionals, a risk of serious injury or death can occur.
- Risks are related to any use of Medisorb™ CO2 Absorbent products other than that for which they are indicated. Clinicians considering such use during the COVID-19 pandemic must weigh the risks and benefits and ensure proper training and safe handling of the products.

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Medisorb™ CO2 absorbent
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Cat. no.: 1407-3201-000
Accessories for reusable Multi canisters for use with Aespire, Avance, Aisys and ADU
1407-3201-000 Medisorb™ multi-absorber dust filter

Key Reminders

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- Dispose saturated Medisorb™ CO2 Absorbent products immediately after use prevents their mistaken re-use.
- Excessive use of oxygen flows induces dehydration of Medisorb™ CO2 Absorbent products and inhibits their ability to absorb carbon dioxide.
- Higher than normal minute ventilation may significantly reduce the amount of time the Medisorb™ CO2 is effective.

RISKS

- During use, continuously monitor the patient to ensure that the filters absorbing carbon dioxide do not become saturated, which could potentially lead to the patient rebreathing carbon dioxide that could result in patient death.
- Anesthesia machines and Vyaire supplies are equipment that support and sustain life. If this equipment is not used properly in accordance with instructions and continuously monitored by trained health care professionals, a risk of serious injury or death can occur.
- Risks are related to any use of Medisorb™ CO2 Absorbent products other than that for which they are indicated. Clinicians considering such use during the COVID-19 pandemic must weigh the risks and benefits and ensure proper training and safe handling of the products.

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Anesthesia Circuits

Vyaire offers a wide range of anesthesia circuits. Anesthesia machines vary greatly from regular ventilators and generally do not include active heating and humidification systems and components. Limb-O™ with HMEF is recommended as the most efficient circuit option. Limb-O™ effectively transfers heat from the expiratory to the inspiratory side of the circuit. This thermal transfer keeps gases warm during surgery and supports normothermic body temperatures.

Cat. no.:	A4YX2XX4D AFNX2XXZP AIN52014 AFPX2XXZP AFPX20XZP A4UB20X4DXX A5U52X14
A4YX2XX4D	ANES CIRCUIT, ADULT, 120 IN EXP, 3L BAG
AFNX2XXZP	ANES CIRCUIT, ADULT, 72 IN LIMBO, 3L BAG
AIN52014	ANES CIRCUIT, ADULT, 72 IN LIMBO, 3L BAG
AFPX2XXZP	ANES CIRCUIT, ADULT, 108" LIMBO, 3L BAG
AFPX20XZP	ANES CIRCUIT, ADULT, 108" LIMBO, 3L BAG
A4UB20X4DXX*	ANES CIRCUIT, ADULT, 108 IN EXP, 3L BAG
A5U52X14	ANES CIRCUIT, ADULT, 108 IN EXP, 3L BAG

*not available for EU

Key Reminders

- A Vyaire anesthesia circuit is intended for conduction of respiratory gases between the anesthesia machine and the patient. It is a single use, disposable product. It should not be used if physical deterioration, brittleness or discoloration occurs.
- **An anesthesia circuit is not recommended to be used for long-term, mechanical ventilation** as this use would be considered off-label. Only if there is a shortage of anesthesia circuits should the long-term use of anesthesia circuits be considered.
- If an anesthesia circuit is to be used for long-term mechanical ventilation on an anesthesia machine:
  - Ensure all connections remain tight and do not loosen during mechanical ventilation.
  - All circuits should be tested for obstructions, occlusions, or leaks in accordance with the ventilator manufacturer's specifications.
  - If any port openings are not used, ensure the attached cover/port caps are secure to prevent leakage.
  - Ventilator monitoring and warning systems should be operational and used as recommended by the ventilator manufacturer.
  - Condensation accumulation within the circuit should be continually monitored during use and evacuated routinely to reduce the hazard of accidental aspiration by the patient.

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RISKS

- Vyaire does NOT recommend the heating of anesthesia circuits.
- Vyaire does NOT recommend multiple patients and/or circuit usage on single anesthesia machines, as this would be considered off-label use. If there is a shortage of ICU ventilators and multiple patients are placed on single anesthesia machines, risk of excessive leak, inadequate tidal volumes, increased condensation and cross-contamination are possible.
- Vyaire does NOT recommend re-use of anesthesia circuits. Anesthesia circuits are intended for single-patient use. Re-use may result in cross-contamination.

AirLife™ HEPA/HMEF with Bacterial/Viral Filter

Vyaire HEPA/HMEF with bacterial/viral filters are intended to be used to provide filtration to reduce possible cross contamination between patients and equipment.

Cat. no.:	M1004132, 557070100, 5708HEPA, 303HEPA, 5096HEPA, 3007, 3009
M1004132	HMEF 750/S
557070100	HMEF 1000 with GSP
5708HEPA	AirLife HMEF HEPA with GSP
303HEPA	AirLife HEPA FILTER
5096HEPA	AirLife Bacterial/Viral
3007	HMEF HEPA
3009	HMEF with flex

Key Reminders

- Vyaire HEPA/HMEF with bacterial/viral filters are intended to be used to provide filtration to reduce possible cross-contamination between patients and equipment.
- HEPA/HMEF with bacterial/viral filters are for use with ventilators, anesthesia machines and open flow systems where filtration of inspired and/or expired gases is desired.
- Monitor the patient for adequate tidal volumes and peak airway pressures.
- The HEPA/HMEF with bacterial/viral filters can also be used for gas sampling. Filters are indicated for use by qualified medical personnel only. If a sampling tube is not connected, make sure that the sampling port cap on the filter is properly attached.
- Replace the HEPA/HMEF with bacterial/viral filters at least every 24 hours or earlier if increased resistance is noted secondary to either excessive condensation, obstruction or other indications of malfunction present.
- HEPA/HMEF with bacterial/viral filters are designed with the intention that their use occur in fully monitored care areas. Device use in conjunction with anesthesia machine usage requires constant attention of qualified professional healthcare personnel.
- The HEPA/HMEF device has dead space which should be taken into consideration when calculating tidal volume and patient ventilation requirements.

vyaire MEDICAL

RISKS

- These devices are for single-patient use. Vyaire does **NOT** recommend using a HEPA/HMEF products on more than one patient as such would be off-label and may cause risk of cross-contamination, affect the measurement accuracy and/or system performance, or cause a malfunction as a result of the product being physically damaged due to cleaning, disinfection, re-sterilization and/or reuse.
- If multiple HEPA/HMEF with bacterial/viral filters are used within the same circuit at the same time because of a shortage of anesthesia circuits, there may be an increased resistance to air flow that may result in patient harm.
- Use of a filter for > 24 hours is not recommended and would be considered off-label use. If there is a shortage of filters and they used for > 24 hours, the anesthesia machine may become contaminated and need to be flushed and sterilized.

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Vyaire Watertrap
Vyaire water traps are recommended for the patient breathing circuit if using a low minute ventilation setting (fresh gas flow of less than 1 liter/minute) and when excessive condensed water accumulates in the limbs, the breathing tubes that connect the anesthetic device and patient.

Cat. no.: 001860
Water trap, disposable W/2

Key Reminders

- Use water traps in both expiratory and inspiratory limbs to remove water condensation.
- The use of water traps for ICU patients requiring long-term mechanical ventilation is considered off-label use.
- Excessive condensation is more likely during long-term mechanical ventilation.
- Device use in conjunction with anesthesia machine usage requires constant attention of qualified professional healthcare personnel.

RISKS

- Excessive condensation can inhibit the function of the water trap. Excessive condensation is more likely during long-term mechanical ventilation and presents the risk of aspiration by the patient.