

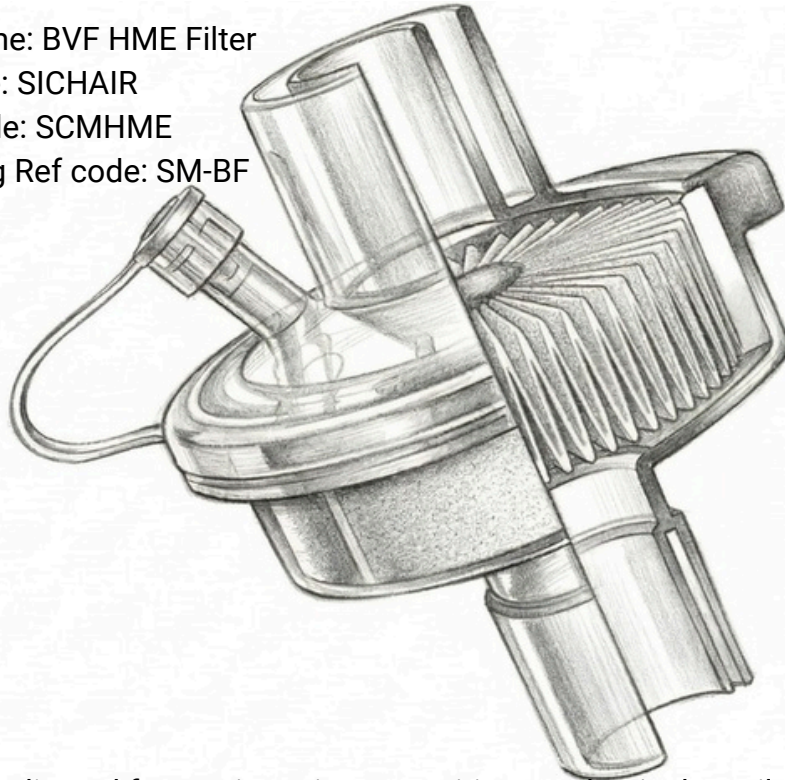
SICHAIR™

Generic name: BVF HME Filter

Brand name: SICHAIR

Product code: SCMHME

Product Mfg Ref code: SM-BF



SICHAIR is indicated for use in patients requiring mechanical ventilation or respiratory support. Its primary function is to preserve the natural humidity and warmth of the patient's respiratory tract. By capturing exhaled heat and moisture,

SICHAIR efficiently returns these essential elements to the patient during inhalation, thereby preventing the drying of mucous membranes. This helps mitigate potential complications associated with prolonged exposure to dry inspired gases, such as airway irritation, mucus retention, and the risk of respiratory infections like ventilator-associated pneumonia.

SICHAIR enhances patient comfort by maintaining a more physiological breathing environment during artificial ventilation, contributing to overall respiratory care and management in clinical settings.

3 variants available:

Model Name/No.	Specification
BVF (Bacterial viral filter)	High performance electrostatic filter media. Gas sampling port at the top of the housing.
HME (Heat and moisture exchange)	Facilitate the normal warming, humidification, and filtering functions of the upper respiratory tract. Heat and moisture exchanges regulate the inspired air by preventing the loss of moisture and heat.
BVF / HME	Includes both properties.

Instructions For Use

- Open the packaging of SICHAIR and verify that the device is intact and sterile.
- Remove SICHAIR from its packaging, handling it by the edges to maintain sterility.
- Check the connections on SICHAIR to ensure they match the connections on the breathing circuit or tracheostomy tube.
- Attach SICHAIR to the patient's endotracheal tube, tracheostomy tube, or ventilator circuit, ensuring a secure fit to prevent air leaks.
- Confirm that SICHAIR is properly positioned to facilitate optimal air humidification and filtration.
- Monitor the patient to ensure SICHAIR is functioning correctly, checking for signs of airway resistance or difficulty in breathing.
- Replace SICHAIR according to the manufacturer's recommended interval or if it becomes visibly soiled or blocked.
- Dispose of the used SICHAIR in accordance with hospital policy.

Key Points in Use

- **Placement:** It is typically positioned at the patient end of the circuit, between the Y-piece and the patient's airway (endotracheal or tracheostomy tube).
- **Duration:** Most are designed for single-patient use and should be replaced every 24 hours, or sooner if they become saturated with secretions.

Comparison: HME vs. BVF vs. Combined (HMEF)

Feature	HME Only	BVF Only	Combined (HME BVF / HMEF)
Main Job	Humidification	Infection Control	Both
Filtration	Minimal/None	High (>99.99%)	High (>99.99%)
Best For	Short transport	Machine protection	Routine mechanical ventilation

Warnings

- Ensure SICHAIR is properly fitted to prevent air leaks.
- Regularly monitor SICHAIR for occlusions.
- Replace SICHAIR if excessive moisture buildup occurs.
- Be cautious of potential blockages from sputum.
- Use SICHAIR for each patient to prevent cross-contamination.
- Check for compatibility of SICHAIR with the ventilation system.
- Do not exceed recommended usage time to maintain efficacy.

- Inspect SICHAIR for damage before use.
- Avoid using in patients with severe pulmonary conditions without consulting a physician

Contraindications Or Usage With Caution Of Sichair

- Presence of thick, copious, or tenacious secretions.
- Use in patients with large air leaks or bronchopleural fistula.
- Recent or ongoing haemoptysis.
- Requirement for high humidity and moisture output.
- Use in patients with a tidal volume less than 100 ml or very high minute ventilation.
- Patients with significant hypothermia.
- Patients with severe asthma or respiratory distress.
- Use in patients who require frequent suctioning.
- Long-term mechanical ventilation where a heated humidifier is more suitable.
- Sensitivity or allergic reactions to materials used in the HME filter.

Precautions

- Ensure SICHAIR is compatible with the ventilation system.
- Inspect SICHAIR for any visible damage or contamination before use.
- Confirm SICHAIR is properly seated and securely attached to prevent air leaks.
- Monitor the patient's condition and airway resistance regularly.
- Replace SICHAIR if it becomes visibly soiled, clogged, or if there is an increase in airway resistance.
- Use SICHAIR in accordance with the manufacturer's recommended duration.
- Do not use SICHAIR if the packaging is damaged or expired.
- Handle SICHAIR with clean hands or wear gloves to maintain sterility.
- Dispose of SICHAIR according to infection control guidelines.
- Avoid using SICHAIR on patients with excessive secretions without regular checks.

Important Considerations:

- Resistance: As SICHAIR captures moisture, breathing resistance can increase over time. It must be monitored closely in patients with low lung capacity.
- Active Humidification: SICHAIR - HME should not be used in conjunction with an active heated humidifier, as the filter may become waterlogged and obstruct the airway.