



KIMBERLY-CLARK* MICROCUFF*
Paediatric Endotracheal Tube



*Finally, a cuffed ET tube designed for
the paediatric anatomy.*



Kimberly-Clark

*Trusted Clinical Solutions**

Common Concerns with Paediatric Endotracheal Tubes



- Short, sensitive paediatric trachea
- Laryngeal and tracheal damage due to inappropriate tube size
- Selecting the correct tube size, risk of repeated re-intubation
- Ensuring correct tube placement
- Accidental tube dislocation
- Ineffective ventilation due to excessive air leak
- Inadequate airway seal for ventilation
- Cuff pressure-induced laryngeal and tracheal trauma
- Aspiration of blood and secretions (ENT, oral/dental surgery)
- Ventilator-associated pneumonia (VAP) in patients on long-term ventilation

**Not All Paediatric Tubes
Are Created Equal!**

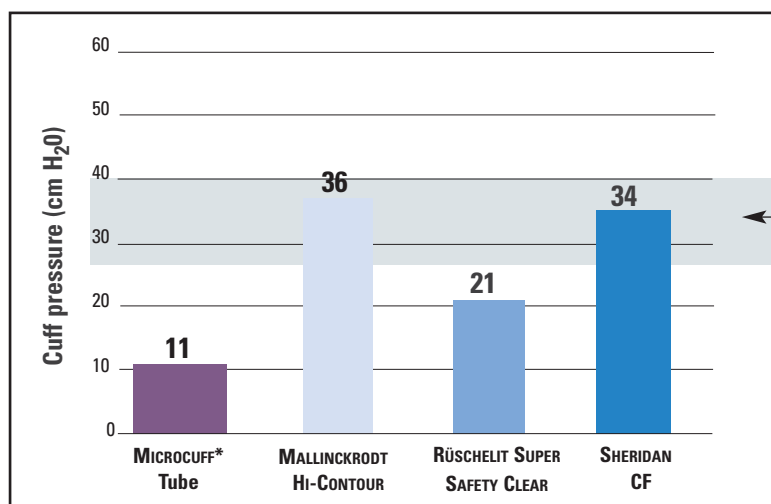


KIMBERLY-CLARK* MICROCUFF* Paediatric Endotracheal Tube A New Standard for Paediatric Airway Management

Advanced microthin polyurethane cuff membrane seals the airway at ultra-low pressure

- Microthin material (10 microns) permits a true high volume, low pressure (HVLP) cuff to reduce cuff pressure
- MICROCUFF* paediatric tubes effectively seal at an average cuff pressure of **11 cm H₂O**¹ about **half** the pressure of conventional tubes
- MICROCUFF* paediatric tubes seal below the commonly presumed capillary perfusion pressure of the paediatric population, diminishing the risk to mucosal tissue²
- Ultra-low cuff pressure can reduce the risk of tracheal trauma
- Microthin polyurethane cuff membrane can withstand burst pressures over **800 cm H₂O**³ and has a puncture strength almost **double** compared to conventional cuffs³

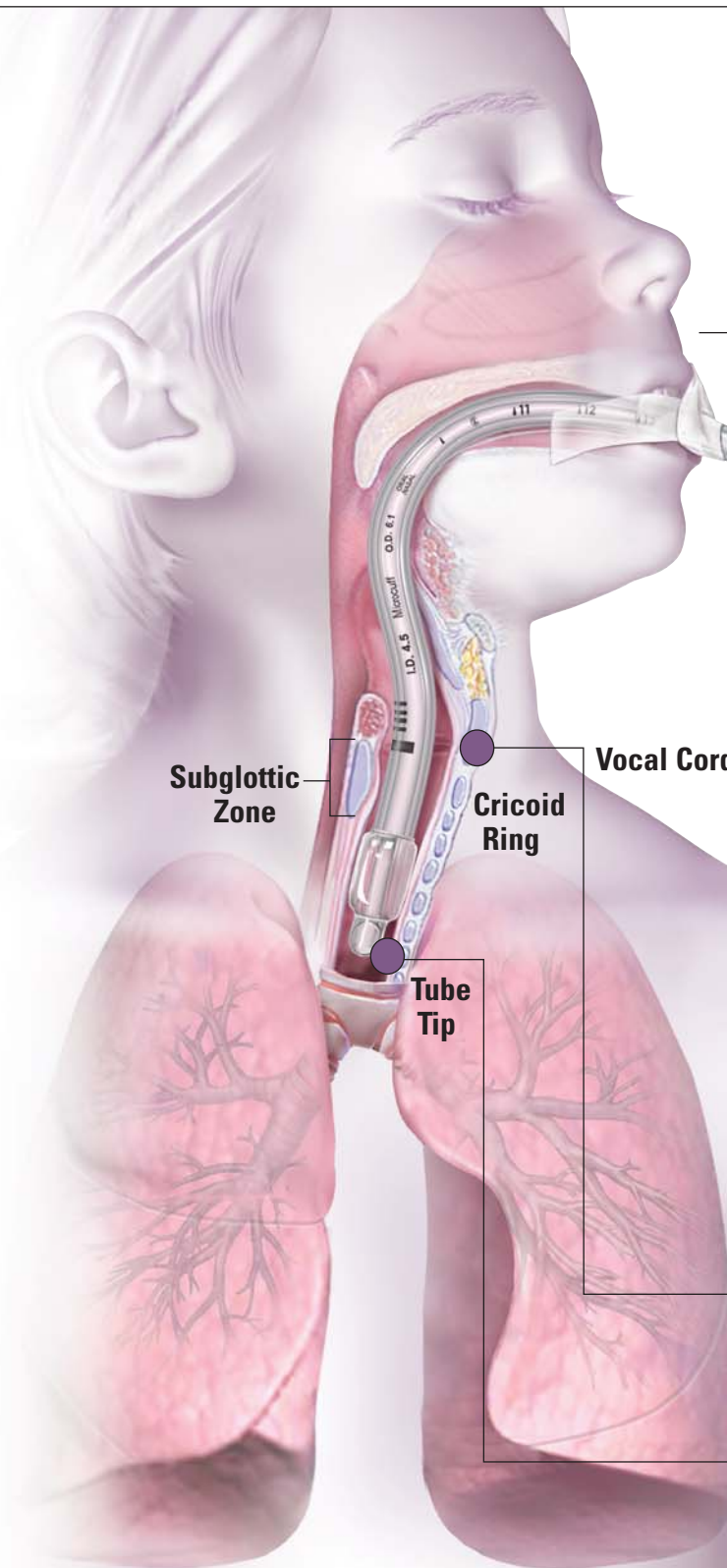
MICROCUFF* tube seals at a lower pressure than conventional paediatric tubes⁴



Capillary perfusion pressure in adults is 27-40 cm H₂O;^{1,2} considered lower in paediatrics.

Median cuff pressure to seal the trachea in children aged 2-4 (n=4x20 patients, ID 4.0mm). Sealing pressure assessed by auscultation within 5 minutes after intubation.

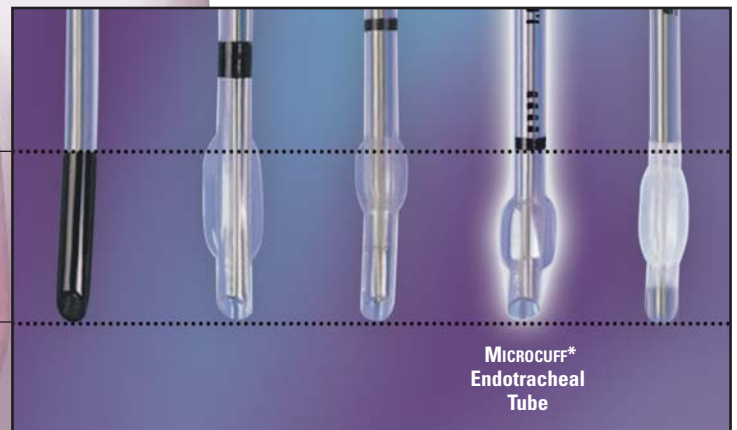
MICROCUFF* Endotracheal Tube is designed for the paediatric airway



MICROCUFF* tube is designed for ideal anatomical cuff placement

- Short, cylindrical cuff placed near the tracheal tube tip — securing cuff placement in the trachea, not in the pressure-sensitive larynx
- Anatomically-based intubation depth marking results in correct placement and a cuff-free subglottic zone⁵
- Four precision bands to facilitate and confirm optimal tube placement

MICROCUFF* tube is designed for paediatric airway



"The intubation depth marks of the MICROCUFF paediatric tracheal tube allowed the safe placement of a cuffed tracheal tube in children from a wide age range"⁵*
— Weiss, et al. BrJ Anaesthesia 2005

atomy — NOT a downsized adult tube

MICROCUFF* tube offers the advantages of a cuffed tube with a NEW level of safety

MICROCUFF* tube provides confidence in a sealed airway

- Seal with a cuff membrane in the trachea instead of rigid tube shaft in the cricoid
- Low rate of re-intubation¹
 - Reduces need to replace oversized tracheal tubes
 - Less patient trauma, time and material costs
- Sealed airway allows for use of minimal and low flow anesthesia
- Sealing with a cuff compensates for different sized and shaped airways

MICROCUFF* tube improves patient care

- Positive pressure ventilation with a sealed airway, providing constant and efficient minute ventilation
- Sealed airway ensures reliable end-tidal CO₂ lung function and oxygen consumption monitoring
- Reduced risk of aspiration of blood and secretions

MICROCUFF* tube allows for safe tracheal intubation and sealing in children²

- In a 500 patient study¹
 - Only 1.6% of patients had to be re-intubated due to incorrect size selection
 - Only 0.4% of patients experienced post extubation croup requiring short-term therapy

"In the hospital setting, a cuffed endotracheal tube is as safe as an uncuffed tube for infants (except the newborn) and children... Evidence has accumulated that cuffed tubes can be safely used in children"⁶
— 2005 American Heart Association Guidelines for CPR and ECC

Low Dead-Space Adapter on sizes 3.0 - 4.5mm



Precision Bands

Intubation Depth Marking

Cuff-Free Subglottic Zone

Short Cuff Length

Short Tip



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KIMBERLY-CLARK* MICROCUFF* Endotracheal Tube, Paediatric Oral/Nasal Magill		
REF Number	Tube Size I.D.	
35111-07	3.0 mm	
35112-07	3.5 mm	
35113-07	4.0 mm	
35114-07	4.5 mm	
35115-07	5.0 mm	
35116-07	5.5 mm	
35117-07	6.0 mm	
35118-07	6.5 mm	
35119-07	7.0 mm	

KIMBERLY-CLARK* MICROCUFF* Endotracheal Tube, Paediatric Oral Curved		
REF Number	Tube Size I.D.	
35161-07	3.0 mm	
35162-07	3.5 mm	
35163-07	4.0 mm	
35164-07	4.5 mm	
35165-07	5.0 mm	
35166-07	5.5 mm	
35167-07	6.0 mm	
35168-07	6.5 mm	
35169-07	7.0 mm	

Recommended Paediatric Tube Size Selection^{1,5}

Oral/Nasal Magill REF	Oral Curved REF	Tube Size I.D.	Age/Weight Years/kg
35111	35161	3.0 mm	Terme / ≥ 3 kg à < 8 mois
35112	35162	3.5 mm	8 mois < 2 ans
35113	35163	4.0 mm	2 à < 4 ans
35114	35164	4.5 mm	4 à < 6 ans
35115	35165	5.0 mm	6 à < 8 ans
35116	35166	5.5 mm	8 à < 10 ans
35117	35167	6.0 mm	10 à < 12 ans
35118	35168	6.5 mm	12 à < 14 ans
35119	35169	7.0 mm	14 à < 16 ans

At Kimberly-Clark, our mission is to deliver clinical solutions that you can depend on to meet the demands of your fast-paced world. Whether your needs involve preventing healthcare-associated infections, surgical and digestive solutions or pain management, with Kimberly-Clark you'll always have one less worry.



Healthcare-Associated Infection Solutions



Surgical Solutions



Digestive Health



Pain Management



Commitment to Excellence

If, for any reason, our products do not meet your expectations, please let us know your comments or suggestions for improvement. Your input will result in a concerted effort on our part to meet your requirements. Our goal is to provide quality products that completely meet your needs time after time.

For more information, please call your Kimberly-Clark representative or visit our web site at www.kchealthcare.com/microcuff.

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