





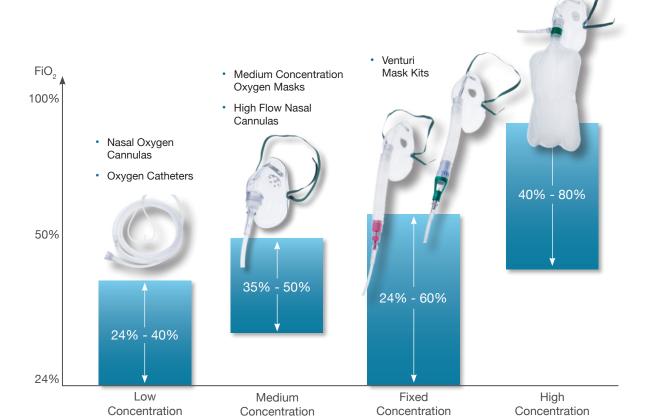
Unomedical Oxygen Delivery System

Different disease patterns and different types of applications require different levels of oxygenation.

The Unomedical Oxygen Delivery System represents a complete range of products to meet virtually any situation, where oxygen supply is required.

The guide below illustrates the level of oxygenation which can be achieved by the different devices and moreover provides information about flow rates.

- High Concentration Oxygen Masks
- · Rebreather Masks
- Non-Rebreather Masks



Acute & chronic use

Used with flow rates up to 6 L/min in adults (depending on ventilatory pattern)¹

Oxygen supplied via nasal cannula at flow rates ≤4 L/min does not need to be humidified.^{2,3}

FiO₂ may fluctuate greatly depending on the breathing pattern of the patient.⁴

Acute use

Medium FiO_2 is delivered depending on fit and breathing pattern of the patient, at flow rates from 5-10 L/min.

Flow rates should be maintained at 5 L/min or more in order to avoid rebreathing exhaled CO₂ that can be retained in the mask.^{1,5,6}

Acute use

Fixed-flow / Fixed concentration systems deliver a prescribed gas mixture.

Venturi Mask Kits deliver the assigned FiO₂ irrespective of the patient's breathing pattern but depending on the fit of the mask

Acute use

Rebreathing mask: At a flow rate of 6-10 L/min the system can provide 40-70% oxygen.

Non-rebreathing mask:
Similar to the rebreathing mask but it has a one-way valve between the bag and the mask to prevent exhaled air from returning to the bag.

At a minimum flow rate of 10 L/min, the delivered FiO₂ of this system is 60-80%.⁷

Oxygen flow should always be supplied to maintain the reservoir bag at least one third to one half full on inspiration.⁷

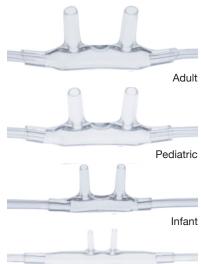
Fulmer JD, Snider GL. ACCP-NHLBI National Conference on Oxygen Therapy. Chest 1984;86(2):234-247. Concurrent publication in Respir Care 1984;29(9):922-935, ²Estey W. Subjective effects of dry versus humidified low-flow oxygen. Respir Care 1980;25(11):1143-1144, ³Campbell EJ, Baker MD, Crites-Silver P. Subjective effects of humidification of oxygen for delivery by nasal cannula: a prospective study. Chest 1988;93(2):289-293, ⁴Bazuaye EA, Stone TN, Corris PA, Gibson GJ. Variability of inspired oxygen concentration with nasal cannulas. Thorax 1992;47(8):609-611, ⁵Reinarz JA, Pierce AK, Mays BB, Sanford JP. The potential role of inhaltion therapy equipment in nosocomial pulmonary infections. J Clin Invest 1965; 44:831-839, ⁶Jensen AG, Johnson A, Sandstedt S. Rebreathing during oxygen treatment with face mask: the effect of oxygen flow rates on ventilation. Acta Anaesthesiol Scand 1991;35(4):289-292, ⁷AARC GUIDELINE: OXYGEN THERAPY FOR ADULTS IN THE ACUTE CARE FACILITY, RESPIRATORY CARE JUNE 2002 VOL47 NO6

Nasal Oxygen Cannulas • Oxygen Catheters











Unomedical Sof-Touch™ Cannulas

Fits-All™

Connector

Specially moulded extra-soft and flexible nasal oxygen cannulas.

No-Crush™ tubing

> Sof-Touch™ nosepiece and extra-soft lariat tubing

> > No-Crush™

tubing

The renowned Sof-Touch™ cannula design has been refined by extending the softness of the nosepiece to the lariat tubing, which has in addition also been equipped with No-Crush™ lumen, providing advanced patient comfort and reliability.

All products are made from clear, discrete 100% DEHP/ Phthalateand Latex-free materials and are equipped with a Fits-All™ Connector, for connection to an oxygen nipple/fir-tree or directly to a flow meter screw eliminating the need for adaptors.

A comprehensive range, including neonatal size, is available in multiple variations.

Standard Cannula tip range





Oxygen Catheters

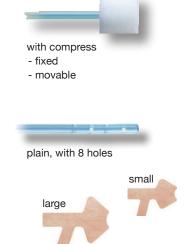
Wide range of sterile mono-nasal oxygen catheters available in four sizes (CH 8,10,12,14) and 3 tip variants.

- Blue colored material helps preventing mix-up with naso-gastric tubes
- Soft rounded distal tips

Naso-Fix[™] Securement Tape

Optimal for fixation of Oxygen Catheters

- Prevents displacement
- Skin friendly fixation at optimum angle
- Skin coloured, discrete appearance
- Available in 3 different sizes





MAC-Safe[™] End-tidal CO₂ Sampling Cannula



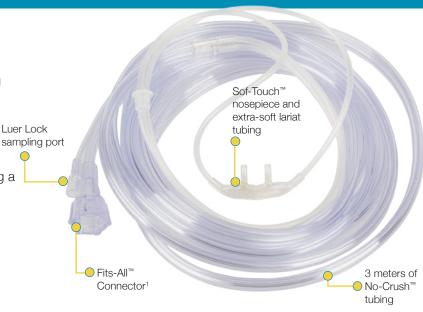


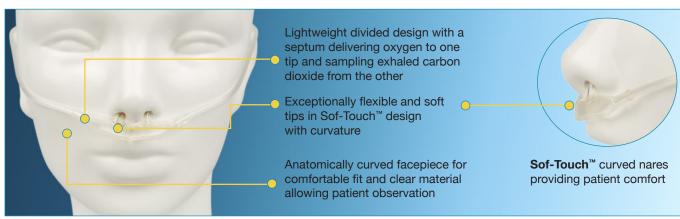
The MAC-Safe™ nasal oxygen cannula is designed to provide oxygen whilst simultaneously monitoring end-tidal carbon-dioxide (etCO₂), for monitoring of non-intubated patients.

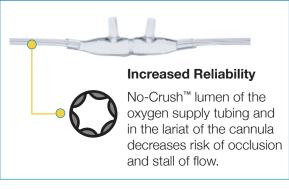
By lightweight, split design and its Sof-Touch™ sample facepiece the MAC-Safe™ nasal oxygen cannula provides undiluted sampling of CO₂ whilst providing a high degree of wearing comfort.

The No-Crush™ lumen, which has also been extended to the lariat portion, helps to provide uninterrupted, reliable gas flow.

Various connection options provide universal connectivity of the device.









By delivering oxygen through one tip and sampling exhaled gas from the other, the MAC-Safe™ cannula provides an undiluted end tidal carbondioxide sample, comparable to those achieved with intubated patients.

Universal connectivity



One 22mm circuit adapter for the oxygen supply line in each single pack The unique "peel-off" design gas-sampling line enables full control on the tubing length, from pig-tail to full length, helping to keep lines and work space organized.









- Designed for delivering concentrations between 35 50%
- Use when precise control of oxygen concentration is not mandatory

Unomedical Oxygen Masks

- Soft and flexible masks with smooth finish for excellent seal and wearing comfort
- · Adjustable nose clip secures comfortable fit
- Enlogated under-the-chin design improves patient acceptance and compliance
- Transparent material enables observation of face colour and vital signs
- All Tubing equipped with No-Crush lumen decreasing risk of occlusion and stall of flow





In analogy to commonly used Face Masks in Anesthesia, ConvaTec offers a range of lightly vanilla scented Oxygenand Aerosol Masks to help improving compliance of certain patients, particularly children and elderly people, feeling unpleasant receiving oxygen via a mask on their face.

The scent is infused into the soft and flexible mask materials. No aerosols or post production perfumes are used. All materials are tested for biocompatibility.



Unomedical Oxygen-and Aerosol-Masks provide excellent seal and wearing comfort

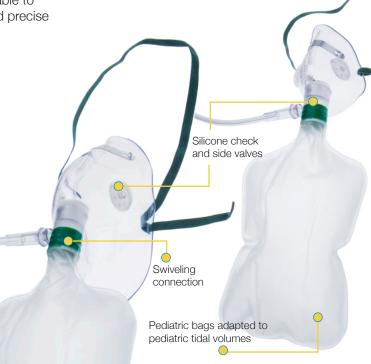
High Concentration Oxygen Masks

• Designed for delivering oxygen concentrations between 40 - 80%

 Use when an adequate amount of oxygen needs to be available to meet unpredictable breathing patterns and tidal volumes and precise control of oxygen concentration is not mandatory

Unomedical Oxygen Masks

- Soft and flexible masks with smooth finish for excellent seal and wearing comfort
- Adjustable nose clip secures comfortable fit
- Elongated under-the-chin design improves patient acceptance and compliance
- Transparent material enables observation of face colour and vital signs
- All Tubing equipped with No-Crush[™] lumen decreasing risk of occlusion and stall of flow
- Swiveling connection between mask and tube/bag reduces the risk of dislocation by torque
- Equipped with Fits-All[™] connector¹ for connection directly to a flow meter screw in case of emergency



¹Products are also available with standard oxygen connector

3-in-1 Emergency Masks • Aerosol Masks



3-in-1 Emergency Masks

3-in-1 emergency masks can easily be (re-) configured into a

- Medium concentration oxygen mask
- High concentration rebreathing mask
- High concentration non-rebreathing mask

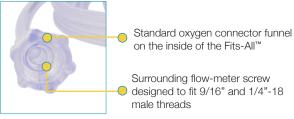
as required, for variable use for example in emergency services.

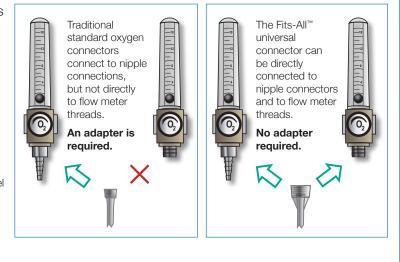
All masks are equipped with No-Crush™ Oxygen Tubing and Fits-All™ Connector¹.

Fits-All[™] **Universal Oxygen Connector**

The Fits-All™ Universal Oxygen Connector provides secure connection between the oxygen supply tube and a variety of oxygen fittings commonly used in hospitals and emergency services.

- Nipple connectors or Christmas tree (fir-tree) fittings and adapters²
- Flow meter 9/16" and 1/4"-18 male threads³





Aerosol Masks

 Soft and flexible masks with smooth finish for excellent seal and wearing comfort

• Adjustable nose clip secures comfortable fit

• Elongated under-the-chin design improves patient acceptance and compliance

 Transparent material enables observation of face colour and vital signs

 Standard aerosol connector and 360° swivel connector design available

• Optionally available with vanilla scent



Opti-Mist™ Nebulizers and Kits **Opti-Mist[™] • Tracheobronchial Nebulizer** With an MMAD of 3.4 micrometers² the Opti-Mist[™] nebulizer is ideal Also available with vanilla scent for tracheobronchial deposition of nebulized drugs. At a driving gas flow of 8 L/min more than 60% of the volume output of the Opti-Mist™ nebulizer are particles with a diameter of less than 5 micrometers. 360° swivelling connector (Smooth finish without Clear material sharp edges 90° angle 5 ml/cc fill volume Clear, soft and flexible mask **Constantly High Performance** material • High nebulization rates provide efficient nebulization at low residual volumes, minimizing medication waste • Usable in positions between vertical and 90° with constant performance adapting to all positioning requirements in Opti-Mist™ Hand-held Kit daily clinical practice Reservoir • Wide product range with pre-assembled kits and single tubing components for mask, hand-held and in-line nebulization Opti-Mist™ Ultra The Alveolar Nebulization Solution Universal Fits-AllTM mouthpiece and Connector¹ Creating ultra-fine particles with a mass t-adapter ONo-Crush™ median aerodynamic diameter (MMAD) of tubing avg. 1.2 micrometers², the Opti-Mist™ Ultra nebulizer is designed for alveolar deposition of particles. For alveolar-/systemic drug deposition Clear Usable in positions between vertical and 90° material Wide product range with pre-assembled kits,

single components for mask and hand-held

operation

6 ml/ccl (fill volume

Up-Mist™ Nebulizers • Fixed Concentration Venturi Mask Kits





Up-Mist[™] • Medium Volume Tracheobronchial Nebulizer

The Unomedical Up-Mist™ nebulizer has a medium sized volume of 20ml and has been especially designed for prolonged nebulization and to provide humidification during ventilation treatment. The two-piece design is easy to operate and produces aerosol of a mass median aerodynamic diameter of 3.6 microns, for mainly tracheobronchial deposition.

Fill Volume 20 ml/cc MMAD at 6LPM 3.6 μ m Min. Aerosol Output 2.1 ml

Up-Mist[™] nebulizer is available as single chamber and in multiple configurations in mask and hand-held kits.



Fixed Concentration Venturi Mask Kits

The principle of a Venturi mask is to deliver a predetermined concentration of oxygen regardless of the patient's respiratory pattern. As oxygen flows in excess of patient demands, a diluter drags in ambient air through the airentrainment ports, creating a constant proportion of air/oxygen mixture. With gas flow constantly in excess of patient demands, rebreathing of CO_2 is almost eliminated.



Unomedical Venturi Mask Kits

Contain a set of 7 diluters to cover all concentrations.

4 LPM 24% blue diluter 4 LPM white diluter 28% 6 LPM orange diluter 31% 8 LPM 35% yellow diluter 10 LPM 40% red diluter 10 LPM 50% pink diluter 12 LPM 60% green diluter

Unomedical Adjustable Venturi Mask Kits

- Contain an easy to adjust variable Venturi valve providing concentrations of 24%, 26%, 28%, 31%, 35%, 40% and 50%
- Equipped with an additional aerosol hood to provide simultaneous supply of aerosolized medication or humification
- Soft and flexible masks with smooth finish for excellent seal and wearing comfort
- · Adjustable nose clip secures comfortable fit
- Elongated under-the-chin design improves patient acceptance and compliance
- Transparent material enables observation of face colour and vital signs swivel connector design available
- Optionally available with vanilla scent



Respiratory Care • Oxygen & Aerosol Therapy Program

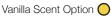


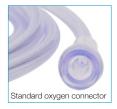






	REF with Fits-All™	REF with Std connector	ltem	Size		Tubing	Quantity (pcs)
	Nasal Oxygen Cannulas						
	93-305MM		Sof-Touch™ Cannula, curved	Adult	-		10/50
Amala	93-318MM	9-318MM	Sof-Touch™ Cannula, curved	Adult	2.1m	No-Crush™	10/50
0 0	93-319MM	9-319MM	Sof-Touch™ Cannula, curved	Adult	4.2m	No-Crush™	10/50
	93-332MM	9-332MM	Sof-Touch™ Cannula, curved	Pediatric	2.1m	No-Crush™	10/50
- And A	93-337MM	9-337MM	Sof-Touch™ Cannula, straight	Infant	2.1m	No-Crush™	10/50
	93-338MM	9-338MM	Sof-Touch™ Cannula, straight	Neonatal	2.1m	No-Crush™	10/50
	93-314HFMM	9-314HFMM	Sof-Touch™ High Flow Cannula, curved	Adult	2.1m	No-Crush™	10/50
	93-312MM	9-312MM	Standard Cannula, straight	Adult	2.1m	No-Crush™	10/50
	93-314MM	9-314MM	Standard Cannula, straight	Adult	4.2m	No-Crush™	10/50
	93-308MM	9-308MM	Standard Cannula, flared, curved	Adult	3.0m	No-Crush™	10/50
	MAC-Safe™ End-tidal CO2 Sampling Cannula						
	93-368MM	9-368MM	MAC-Safe™ Male Luer Lock	Adult	3.0m	No-Crush™	10/20
	93-369MM	9-369MM	MAC-Safe™ Female Luer Lock	Adult	3.0m	No-Crush™	10/20
	93-362MM	9-362MM	MAC-Safe™ Male Luer Lock	Pediatric	3.0m	No-Crush™	10/20
	93-363MM	9-363MM	MAC-Safe™ Female Luer Lock	Pediatric	3.0m	No-Crush™	10/20
	Oxygen Cathet	ers*					
		1903418x	O ₂ Catheter, Plain, male connector	CH 08	40 cm	Standard	100
		1903518x	O ₂ Catheter, Plain, male connector	CH 10	40 cm	Standard	100
		1903718x	O ₂ Catheter, Plain, male connector	CH 12	40 cm	Standard	100
		1903818x	O ₂ Catheter, Plain, male connector	CH 14	40 cm	Standard	100
		1903918x	O ₂ Catheter w.compress, male connector	CH 08	40 cm	Standard	100
		1904018x	O ₂ Catheter w.compress, male connector	CH 10	40 cm	Standard	100
		1904118x	O ₂ Catheter w.compress, male connector	CH 12	40 cm	Standard	100
This bear		1904218x	O ₂ Catheter w.compress, male connector	CH 14	40 cm	Standard	100
- Control of the Cont		1902918x	${\rm O_2}$ Catheter w.adj.compress, male connector	CH 08	40 cm	Standard	100
		1903018x	${\rm O_2}$ Catheter w.adj.compress, male connector	CH 10	40 cm	Standard	100
		1903218x	${\rm O_2}$ Catheter w.adj.compress, male connector	CH 14	40 cm	Standard	100
	Medium Conce	ntration Oxyge	n Masks				
	93-103MM		O ₂ Mask, Medium Concentration	Adult	-	_	10/50
	93-102MM	9-102MM	O ₂ Mask, Medium Concentration	Adult	2.1m	No-Crush™	10/50
	93-223MM		O ₂ Mask, Medium Concentration	Pediatric	-		10/50
	93-222MM	9-222MM	O ₂ Mask, Medium Concentration	Pediatric	2.1m	No-Crush™	10/50
	93-263MM		O ₂ Mask, Medium Concentration	Infant	-		10/50
	93-262MM	9-262MM	O ₂ Mask, Medium Concentration	Infant	2.1m	No-Crush™	10/50
	93-103MMV		O ₂ Mask, Medium Concentration, Vanilla Scent	Adult	-		10/50
	93-102MMV	9-102MMV	O ₂ Mask, Medium Concentration, Vanilla Scent	Adult	2.1m	No-Crush™	10/50
0	93-1023MMV	9-1023MMV	O ₂ Mask, Medium Concentration, Vanilla Scent	Adult	3.0m	No-Crush™	10/50
0	93-223MMV		O ₂ Mask, Medium Concentration, Vanilla Scent	Pediatric	-		10/50
0	93-222MMV	9-222MMV	O ₂ Mask, Medium Concentration, Vanilla Scent	Pediatric	2.1m	No-Crush™	10/50







 $^{^{\}star}$ Here noted as x, reference codes contain an additional digit (1-5) representing a language code.

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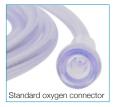








Vanilla Scent Option O





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	REF with Fits-All™	REF with Std connector	ltem	Size	Tubing		Quantity (pcs)
	Opti-Mist™ Ultr	a Nebulizers &	Kits				
	93-870MM		Nebulizer, Opti-Mist [™] , Chamber only	-	-		10/50
	93-871MM	9-871MM	Nebulizer Kit, Opti-Mist™, Hand-held	-	2.1m	No-Crush™	10/50
	93-872MM	9-872MM	Nebulizer Kit, Opti-Mist™ with Mask	Adult	2.1m	No-Crush™	10/50
	93-873MM	9-873MM	Nebulizer Kit, Opti-Mist™ with Mask	Pediatric	2.1m	No-Crush™	10/50
	93-4303MM	9-4303MM	Opti-Mist™ Ultra Closed System Kit	-	2.1m	No-Crush™	10/50
	Up-Mist™ Nebuliz		- F				
		93-950MM	Nebulizer, Up-Mist™, Chamber only	-	-		10/50
		93-958MM	Nebulizer Kit,Up-Mist™, Hand-held, no reservoir	-	-		10/50
	93-952MM	9-952MM	Nebulizer Kit,Up-Mist™, Hand-held, no reservoir	-	2.1m	No-Crush™	10/50
	93-959MM	9-959MM	Nebulizer Kit,Up-Mist™, Hand-held	-	2.1m	No-Crush™	10/50
	93-953MM	9-953MM	Nebulizer Kit, Up-Mist™ with Mask	Adult	2.1m	No-Crush™	10/50
	93-228MM	9-228MM	Nebulizer Kit, Up-Mist™ with Mask	Pediatric	2.1m	No-Crush™	10/50
	Aerosol Masks	0 22011111	. To built and the state of the	r odiatio		• re order	10,00
		93-100MM	Aerosol Face Mask, Elongated	Adult	-		10/50
		93-220MM	Aerosol Face Mask, Elongated	Pediatric	-		10/50
		93-100LMM	Aerosol Face Mask, Elongated w. 360° Swivel	Adult	-		10/50
		93-220LMM 93-260MM	Aerosol Face Mask, Elongated w. 360° Swivel Aerosol Face Mask	Pediatric	-		10/50 10/50
		93-200IVIIVI	Aerosol Face Mask, Elongated, Vanilla Scent	Infant Adult	-		10/50
		93-220MMV	Aerosol Face Mask, Elongated, Vanilla Scent	Pediatric	-		10/50
		93-245MM	Tracheostomy Mask	Adult	-		10/50
		93-246MM	Tracheostomy Mask	Pediatric	-		10/50
		93-110MM	Face Tent	Adult	-		10/50
	Oxygen & Aeros	ol Tubing					
	93-402MM	9-402MM	Oxygen Tubing Fits-All™/Std or Std/Std	-	2.1m	No-Crush™	10/50
	93-404MM	9-404MM	Oxygen Tubing Fits-All™/Std or Std/Std	-	4.2m	No-Crush™	10/50
	93-407MM	9-407MM	Oxygen Tubing Fits-All™/Std or Std/Std	-	7.6m	No-Crush™	5/25
	93-408MM	9-408MM	Oxygen Tubing Fits-All™/Std or Std/Std	-	15.2m	No-Crush™	10/20
		93-414MM	Tubing No Connectors, ID 4.75, OD 7.14 mm	-	10m	Smooth bore	1/10
		93-430MM	Tubing No Connectors, ID 4.75, OD 7.14 mm	-	30m	Smooth bore	1/1
		93-600MM	Corrugated Aerosol Tube, cuttable every 15cm	-	30.5m		1/1
		93-626MM	Corrugated Aerosol Tube, cuttable every 15cm	-	1.8m		5/10
		93-969MM	22mm-Aerosol-to-Oxygen Nipple Adapter	-	-		10/50
	Gas Sampling L	ines for et CO_2 N	 Monitoring				
		93-892MM	Gas Sampling Line, ID 1.27/ OD 3.33mm, M/M	Luer Lock	3.0m	Smooth bore	10/30
		93-895MM	Gas Sampling Line, ID 1.68/ OD 3.33mm, M/M	Luer Lock	3.0m	Smooth bore	10/30
		93-897MM	Gas Sampling Line, ID 1.68/ OD 3.33mm, M/F	Luer Lock	3.0m	Smooth bore	10/30
		93-898MM	Gas Sampling Line, ID 1.27/ OD 3.33mm, M/F		3.0m	Smooth bore	10/30
	Accessories		, J				
		93-1379MM	Aerosol T-Piece 22/18 x 22/15 x 22/18 mm	-	_		10/50
		93-865MM	Aerosol Mouth Piece, Single	-	_		10/50
		93-500MM	Bubble Humidifier, 250ml/cc, 5 PSI	-	-		10/50
		625M-L	Naso-Fix™ Securement Tape, Large	Adult	_		100/1600
		625M-S	Naso-Fix™ Securement Tape, Small	Pediatric	_		
			·		-		100/1600
		625M-I	Naso-Fix™ Securement Tape, Infant	Infant	-		100/1600



For further information on these products, please contact your local ConvaTec sales representative.

With reservations for misprints and alterations in product specifications. Printed version not controlled.



ConvaTec