Respiratory Care and Aerosol Therapy

MANUAL SILICONE RESUSCITATORS
RESUSCITATION SETS
DISPOSABLE RESUSCITATORS
CPR POCKET RESUSCITATOR
SILICONE MASKS
GUEDEL AIRWAYS
AEROSOL MASKS
OXYGEN & HI-OXYGEN
OXYGEN CANNULA
TUBING & CONNECTORS
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DISPOSABLE RESUSCITATORS

Disposable Bag Mask Resuscitators are made with a lightly-textured PVC bag for sure grip and comfort and a transparent re-breathing valve assembly allows for clear viewing of value function. Available in adult, pediatric, and infant sizes.

Features
- Meets ISO-8382 and ASTM0920 standards
- Texture surface for slip free operation in wet conditions
- Faster rebound and less memory material applied for ease of operation
- Ergo designed shape provides ease of handling and less access force
- Clear resuscitation bag for ease of observation
- High efficiency silicone duckbill patient valve minimizes back leakage
- Provides low inspiratory and expiratory resistance
- Swivel 15/22mm patient connector
- Meets ISO-5356-2 standard
- 40cm H2O pressure relief for child and infant models
- 60cm H2O pressure relief available with or without lock function for adult model
- 32mm reservoir connection for lower intake resistance
- High efficiency reservoir system provides up to 99% oxygen concentration at low flow
- Oxygen tubing connection for ease of access
- Inflatable clear air cushion mask provides better seal, ease of observation during access and also patient comfort
- Latex Free

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Mask</th>
<th>Reservoir</th>
<th>Pop-Off</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRES3403RI</td>
<td>LIBERTY ADULT DISPOSABLE RESUSCITATOR</td>
<td>#5</td>
<td>1000ML</td>
<td>60CM H20</td>
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<tr>
<td>LRES3403EI</td>
<td>LIBERTY ADULT DISPOSABLE RESUSCITATOR</td>
<td>#5</td>
<td>1000ML</td>
<td>NO POP-OFF</td>
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<tr>
<td>LRES0484QI</td>
<td>LIBERTY CHILD DISPOSABLE RESUSCITATOR</td>
<td>#3</td>
<td>1000ML</td>
<td>40CM H20</td>
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<tr>
<td>LRES0486QI</td>
<td>LIBERTY INFANT DISPOSABLE RESUSCITATOR</td>
<td>#0</td>
<td>1000ML</td>
<td>40CM H20</td>
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</tbody>
</table>
MANUAL SILICONE RESUSCITATORS

**Adult Silicone Resuscitator**

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material</td>
<td>Polycarbonate, silicone rubber and polyvinyl chloride</td>
</tr>
<tr>
<td>Connectors</td>
<td>15/22mm ISO patient connector, 23mmID silicone neck, 26mmID (to silicone bag inlet)</td>
</tr>
<tr>
<td>Reservoir Volume</td>
<td>2500ml</td>
</tr>
<tr>
<td>Max. Oxygen Concentration</td>
<td>99% (with oxygen supply)</td>
</tr>
<tr>
<td>Operating Conditions</td>
<td>-18ºC to 50ºC</td>
</tr>
<tr>
<td>Latex Free</td>
<td></td>
</tr>
</tbody>
</table>

**Order Code** | LRES3103RI | **Description** | ADULT MANUAL SILICONE RESUSCITATOR

**Child Silicone Resuscitator**

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Material</td>
<td></td>
</tr>
<tr>
<td>Connectors</td>
<td></td>
</tr>
<tr>
<td>Reservoir Volume</td>
<td></td>
</tr>
<tr>
<td>Max. Oxygen Concentration</td>
<td></td>
</tr>
<tr>
<td>Operating Conditions</td>
<td></td>
</tr>
<tr>
<td>Latex Free</td>
<td></td>
</tr>
</tbody>
</table>

**Order Code** | LRES3203QI | **Description** | CHILD MANUAL SILICONE RESUSCITATOR

**Infant Silicone Resuscitator**

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material</td>
<td></td>
</tr>
<tr>
<td>Connectors</td>
<td></td>
</tr>
<tr>
<td>Reservoir Volume</td>
<td></td>
</tr>
<tr>
<td>Max. Oxygen Concentration</td>
<td></td>
</tr>
<tr>
<td>Operating Conditions</td>
<td></td>
</tr>
<tr>
<td>Latex Free</td>
<td></td>
</tr>
</tbody>
</table>

**Order Code** | LRES3303QI | **Description** | INFANT MANUAL SILICONE RESUSCITATOR

**Autoclavable to 134ºC**

- Mask #5
- Reservoir 02
- Pop-Off 60cm H2O
- Pressure Relief 60 ± 10cm H2O
- Lock type override mechanism
- Maximum Stroke volume 1500/1350ml
- Max breath cycle rate 45bpm

**Mask #3**

- Reservoir 02
- Pop-Off 40cm H2O
- Pressure Relief 40 ± 5cm H2O
- Maximum Stroke volume 550/350ml
- Max breath cycle rate 105bpm

**Mask #1**

- Reservoir 02
- Pop-Off 40cm H2O
- Pressure Relief 40 ± 5cm H2O
- Maximum Stroke volume 280/100ml
- Max breath cycle rate 98bpm
RESUSCITATION SETS

Economical, durable silicone manual resuscitator designed to meet the need for high performance and low cost. Constructed from polycarbonate and silicone material that is autoclavable up to 134°C.

Adult Resuscitation Set

- Adult resuscitator 1500ml with 60cm H2O pop-off valve
- 2500ml Oxygen reservoir
- Two adult masks #5, #4
- Two guedel airways
- See through carry case with instruction manual

Child Resuscitation Set

- Child resuscitator 550ml with 40cm H2O pop-off valve
- 2500ml Oxygen reservoir
- Two child masks #3, #2
- Two guedel airways
- See through carry case with instruction manual

Infant Resuscitation Set

- Infant resuscitator 280ml with 40cm H2O pop-off valve
- 600ml Oxygen reservoir
- Two infant masks #1, #0
- Two guedel airways
- See through carry case with instruction manual
RESUSCITATION & AEROSOL THERAPY

GUEDEL AIRWAYS & SILICONE MASKS

Peep Valve

- Poly carbonate plastic housing
- Colour coded silicone rubber valves and grommet
- Blue colour 5cm – 20cm H20 30mm ID
- Stainless steel shifter and spring
- Material: PC, Stainless Steel, Silicone

<table>
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<th>Description</th>
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<tbody>
<tr>
<td>LRESPN0044</td>
<td>LIBERTY PEEP VALVE 5 – 20CM H20 30MM ID</td>
</tr>
</tbody>
</table>

Guedel Airways

- Suitable for maintaining an unobstructed oropharyngeal airway during general anaesthesia and in unconscious patients
- Rounded atraumatic edges
- Smooth airway path for easy cleaning
- Bite block to prevent biting of tongue and airway occlusion
- Single use only
- Color coded for easy identification of sizes

<table>
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<tr>
<th>Order Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>LRESAW0514</td>
<td>GUEDEL AIRWAY 40MM COLOUR PINK</td>
</tr>
<tr>
<td>LRESAW0515</td>
<td>GUEDEL AIRWAY 50MM COLOUR BLUE</td>
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<tr>
<td>LRESAW0516</td>
<td>GUEDEL AIRWAY 60MM COLOUR BLACK</td>
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<tr>
<td>LRESAW0517</td>
<td>GUEDEL AIRWAY 70MM COLOUR WHITE</td>
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<tr>
<td>LRESAW0518</td>
<td>GUEDEL AIRWAY 80MM COLOUR GREEN</td>
</tr>
<tr>
<td>LRESAW0519</td>
<td>GUEDEL AIRWAY 90MM COLOUR YELLOW</td>
</tr>
<tr>
<td>LRESAW0520</td>
<td>GUEDEL AIRWAY 100MM COLOUR RED</td>
</tr>
<tr>
<td>LRESAW0521</td>
<td>GUEDEL AIRWAY 110MM COLOUR ORANGE</td>
</tr>
</tbody>
</table>

Silicone Masks

- Material: Polycarbonate and/or silicone rubber
- Autoclavable up to 134°C

<table>
<thead>
<tr>
<th>Order Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>LRESPN0000</td>
<td>SILICONE MASK NO. 0 INFANT</td>
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<tr>
<td>LRESPN0001</td>
<td>SILICONE MASK NO. 1 LARGE INFANT</td>
</tr>
<tr>
<td>LRESPN0002</td>
<td>SILICONE MASK NO. 2 CHILD</td>
</tr>
<tr>
<td>LRESPN0003</td>
<td>SILICONE MASK NO. 3 LARGE CHILD</td>
</tr>
<tr>
<td>LRESPN0004</td>
<td>SILICONE MASK NO. 4 ADULT</td>
</tr>
<tr>
<td>LRESPN0005</td>
<td>SILICONE MASK NO. 5 LARGE ADULT</td>
</tr>
</tbody>
</table>
CPR POCKET RESUSCITATOR

The Liberty CPR Mask is ready to use right out of its rugged storage case. The latex-free mask comes complete with filtered inlet valve, O2 inlet port and head strap. The Liberty CPR Mask is a single-use mask used for mouth to mask ventilation.

Features:
- Bacterial air filter
- Leakage free air cushion mask
- Silicone one way valve
- Single use material
- Oxygen port
- Detachable mouthpiece - mask can then be connected to other resuscitation devices
- Mask shell folds for compact storage
- Complete with compact carry case
- Custom labelling - bulk quantities apply
- Latex free
- Disposable

Specifications:

<table>
<thead>
<tr>
<th>Connections</th>
<th>15mm OD</th>
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<tr>
<td>Material</td>
<td>PVC - Single patient use</td>
</tr>
<tr>
<td>Oxygen Concentration</td>
<td>40 – 80 % (depending on flow and ventilation cycles)</td>
</tr>
<tr>
<td>Measurements (case)</td>
<td>138 x 108 x 48mm</td>
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<tr>
<td>Weight</td>
<td>100g</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-18 to 15°C</td>
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</table>

Order Code  Description
LRESPN1141  LIBERTY CPR POCKET RESUSCITATOR
Aerosol therapy is a type of medical treatment that is employed to address different forms of breathing conditions. It might be used to treat chronic asthma, acute asthma, chronic obstructive pulmonary disorder (COPD) or other illnesses that impact airway functioning.

**Aerosol Masks**

- Soft, transparent, odour free vinyl mask
- Swivel connection
- 2 metre tubing
- Jet nebuliser bowl
- Graduated bowl
- Dead Space: 0.5ml
- 0.5 - 5 micron
- Flow Range: 4 - 12 LPM

<table>
<thead>
<tr>
<th>Order Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>LRESA0205</td>
<td>LIBERTY JET NEBULISER BOWL/MASK/TUBING ADULT</td>
</tr>
<tr>
<td>LRESA0206</td>
<td>LIBERTY JET NEBULISER BOWL/MASK/TUBING CHILD</td>
</tr>
</tbody>
</table>

**What is a Nebuliser?**

Nebulisers are used to convert liquids into aerosols of a size that can be inhaled into the lower respiratory tract. The process of pneumatically converting a bulk liquid into small droplets is called atomisation.

This device often used to inhale medication to treat asthma or other lung conditions. The medication can reach the lungs and the airways, or bronchi, directly and reduce inflammation that can cause the passages to narrow. Also called aerosol machines, nebulisers usually consist of an air compressor, tubing, plastic cup, and mask. The first step is typically to measure a dose of medication in the nebuliser cup, or pour a pre-measured dose into it so that too much or too little isn’t taken.

After the dosage is measured, the machine can be turned on. The compressor in the aerosol machine normally causes air to be pushed through the device’s tubing. A mist is usually formed from the liquid medication in the cup, and is passed through the tubes. It can be breathed in through either a mask or mouthpiece.

Common medications that are used with an aerosol machine include bronchodilators capable of relaxing the muscle tissue surrounding the bronchial tubes. The airways can then expand so enough oxygen flows to the lungs. There are some varieties of medication that are suited for use with an aerosol or an inhaler, while some can be used with both. Other medicines can treat spasms in the bronchial tubes; sometimes a meter can be used to test the air flow when breathing to see if the treatment works.
Oxygen Therapy

What is Oxygen Therapy?
Oxygen therapy is a treatment that provides you with extra oxygen, a gas that your body needs to work well. Normally, your lungs absorb oxygen from the air. However, some diseases and conditions can prevent you from getting enough oxygen.

Oxygen therapy may help you function better and be more active. Oxygen is supplied in a metal cylinder or other container. It flows through a tube and is delivered to your lungs in one of the following ways:

- Through a nasal cannula, which consists of two small plastic tubes, or prongs, that are placed in both nostrils.
- Through a face mask, which fits over your nose and mouth.
- Through a small tube inserted into your windpipe through the front of your neck. Your doctor will use a needle or small incision (cut) to place the tube. Oxygen delivered this way is called transtracheal oxygen therapy.

Oxygen therapy can be done in a hospital, another medical setting, or at home. If you need oxygen therapy for a chronic (ongoing) disease or condition, you might receive home oxygen therapy.

What is Aerosol Therapy?
Aerosol therapy allows the delivery of medications, humidity, or both to the mucosa of the respiratory tract and pulmonary alveoli.

Agents are delivered by aerosol (a colloid system in which solid or liquid particles are suspended in a gas, especially a suspension of a drug or other substance to be dispensed in a cloud or mist) therapy may relieve spasm of the bronchial muscles and reduce edema of the mucous membranes, liquefy bronchial secretions so that they are more easily removed, humidify the respiratory tract, and administer antibiotics locally by depositing them in the respiratory tract.
AEROSOL THERAPY

High-Oxygen Concentration Masks

- Delivery of 99% – 100% oxygen concentration
- Oxygen reservoir and non-rebreathing valve
- Soft, transparent, odour free vinyl
- Aluminium fixer and latex free elastic strip to ensure the best fit and user comfort
- One way valve and reservoir to increase the efficiency of oxygen concentration
- Swivel connection

<table>
<thead>
<tr>
<th>Order Code</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>LRESA0301</td>
<td>LIBERTY HIGH OXYGEN CONCENTRATION MASK WITH TUBING/RESERVOIR ADULT</td>
</tr>
<tr>
<td>LRESA0302</td>
<td>LIBERTY HIGH OXYGEN CONCENTRATION MASK WITH TUBING/RESERVOIR LARGE CHILD/STANDARD ADULT</td>
</tr>
</tbody>
</table>

What is a Non-Rebreathing Oxygen Mask?

The non-rebreathing oxygen mask enables the delivery of high concentrations of oxygen and is recommended for use in patients who are critically ill.

In order to ensure that the mask is functioning correctly and is used effectively, it is important to follow the manufacturer’s recommendations for simple, basic checks prior to use.

The non-rebreathing mask (sometimes called a Hudson mask) with an oxygen reservoir bag, can be used to deliver high concentrations of oxygen to a spontaneously breathing patient.

A one-way valve diverts the oxygen flow into the reservoir bag during expiration; the contents of the reservoir bag, together with the high flow of oxygen, result in minimal entrainment of air and an inspired oxygen concentration of approximately 85%.

The valve also prevents exhaled gases from entering the reservoir bag. The use of the oxygen reservoir bag helps to increase the inspired oxygen concentration by preventing oxygen loss during inspiration. It is important to ensure that a sufficient oxygen flow rate is used so the oxygen reservoir bag does not collapse during inspiration; a flow rate of 12–15 l/minute is recommended.

Some non-rebreathing masks have elasticated ear loop bands. As these eliminate the need to move the patient’s head, they are used frequently in A&E departments for trauma patients.
RESUSCITATION & AEROSOL THERAPY

AEROSOL THERAPY

Nasal Cannula

- Soft, transparent, odour free PVC to ensure the best fit and user comfort
- Soft tip, over the ear style to provide low flow oxygen
- Disposable, anti crush 2 metre tubing
- Latex Free

Order Code | Description
--- | ---
LRESC0205 | LIBERTY SOFT NASAL CANNULA WITH 2 METRE TUBING ADULT
LRESC0206 | LIBERTY SOFT NASAL CANNULA WITH 2 METRE TUBING CHILD
LRESC0207 | LIBERTY SOFT NASAL CANNULA WITH 2 METRE TUBING INFANT
LRESC0208 | LIBERTY SOFT NASAL CANNULA WITH 2 METRE TUBING NEONATE

What is a Nasal Cannula?

A nasal cannula is a narrow, flexible plastic tubing used to deliver oxygen through the nostrils of patients using nasal breathing. It connects to an oxygen outlet, a tank source or compressor, on one end and has a loop at the other end with dual pronged extended openings at the top of the loop. The prongs are slightly curved to fit readily into the front portion of a patient’s nostrils. The tubing of the loop is fitted over the patient’s ears and is brought together under the chin by a sliding connector that holds the cannula in place.

Oxygen Tubing

- Disposable oxygen supply tubing, crush-resistant
- Length = 2 metres

Order Code | Description
--- | ---
LRESCO401 | LIBERTY OXYGEN TUBING 2 METRES

Oxygen Tubing Connector

- Oxygen supply tubing connector

Order Code | Description
--- | ---
LRESPN1139 | LIBERTY OXYGEN TUBING CONNECTOR (PACK 20)