

Home Oxygen Cylinders Equipment Guide.

A passion for care. A partner for you.



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IMPORTANT: Please ensure you read all accompanying literature supplied prior to using your home oxygen equipment. In particular, pay attention to the section on not smoking or allowing others to smoke near your equipment.

BOC Healthcare pioneers the medical gas products and services that will deliver tomorrow's patient care today. Our unrivalled commitment to improving medical gas technology optimises patient treatment. All BOC Healthcare gas cylinders are designed to be robust, reliable, convenient to use and safe to handle. To provide the highest quality, all cylinders are tested at every fill to ensure patient safety.

The benefits and features of our cylinders.



- Constantly live gauge indicates gas levels, even when the cylinder is not turned on.
- Higher gas capacity for less cylinder changes.
- Lightweight for less lifting effort, making it ideal for ambulatory use.
- Clear product labelling.
- Improved manual handling, minimising the risk of injury.
- Easier to store and handle due to its flat stable base and carry handle.
- Tamper-evident covers to ensure the gas is uncontaminated and safe for the patient.
- Simple push fit connection to save time.

With BOC Healthcare as your provider, you can be sure to benefit from leading edge technology.

Initial safety checks.

Before handling cylinders ensure your hands are clean. If you have been using alcohol based gel or liquids to decontaminate your hands make sure the alcohol has totally evaporated.

When selecting the cylinder for use, check that the cylinder is clean and free from any damage. Ensure the cylinder is free from oil and grease, particularly around the valve outlet.

Preparing a new cylinder for use.

If the cylinder has been used before, make sure you have sufficient gas for treatment by inspecting the contents gauge. If the needle is in the red zone there is limited capacity and you may need to change the cylinder (see duration chart on page 8).



1. Ensure you have the correct medical gas by checking the cylinder label.



2. Check the expiry date on the batch label fitted to the cylinder.



3. Make sure the contents gauge is in the green zone. This indicates that the cylinder is FULL.



4. Remove the tamper evident handwheel cover by pulling the tear ring.
Discard the cover into the recycle bin. If the cylinder has been used before this cover will not be present.



5. Remove the valve outlet cover.
a) The hinged grey cover is pulled down.
Do not remove the grey cover and refit after use.



b) The red cover is removed by pulling towards you.
Retain the red cover to refit after use.



6. Ensure the flow selector on top of the cylinder is set to zero and the hand wheel is turned off before connecting equipment.

Important Note:

Ensure cylinder is upright when preparing cylinder for use. When setting up or using your cylinder do not place it on the bed or soft furnishings as an oxygen leak could lead to oxygen enrichment of the materials making them vulnerable to ignite.

Using the oxygen outlet.



1. Attach tubing from mask or nasal cannula to the valve outlet. Ensure the tubing is pushed on securely.



2. Slowly turn on the cylinder by rotating the hand wheel anticlockwise until it comes to a complete stop. Do not use excessive force.



3. Set the prescribed flow by rotating the dial flow selector. Ensure that the correct flow rate number is clearly visible in the flow selector window.



4. Place a mask or nasal cannula onto yourself or user. If using a mask ensure a tight seal. Check the gas is flowing and that there are no leaks indicated by a hissing sound.⁽¹⁾



5. Check the contents gauge at regular intervals, to ensure there is sufficient gas.

⁽¹⁾ **Note:** If you suspect that you have a leak, turn off the cylinder and check the equipment is properly connected. Turn on the cylinder and re-check for leaks. If the leak continues, turn off and quarantine the cylinder outside the home and away from other cylinders. Contact BOC on 0800 136 603.

After use for integral regulators.



1. Turn off the cylinder by rotating the hand wheel clockwise until it comes to a stop. Do not use excessive force.



2. Disconnect equipment.
i) Remove the tubing by firmly pulling the tube whilst holding the cylinder handle.



3. Turn the flow selector to zero.



4. Replace the outlet cover.
i) Pull up the hinged grey cover.
ii) Refit the red cover.



5. Check the cylinder gauge, for content level (refer to duration chart).
Return the cylinder to a designated 'in use' or empty storage area.

Safety information and precautions.

- Oxygen is a non-flammable gas, but strongly supports combustion.
- Do not store or use cylinders near naked flames, sources of ignition or combustible materials.
- Ensure the oxygen cylinders are stored in a safe and secure area where they cannot fall over and cause injury.
- Ensure separation of full and empty cylinders.
- Store oxygen cylinders in a well-ventilated area that is clean and dry, preferably inside.
- Smoking should not be permitted in the vicinity where cylinders are used or stored.
- Ensure labels remain clearly visible at all times. Labels must not be removed or covered and unauthorised labels must not be fitted to cylinders.
- Do not refill the cylinder or attempt to tamper with the cylinder package.
- Do not use oil or grease (or any-oil based products which include hand creams) in the vicinity of an oxygen cylinder.
- Do not place the cylinder on your bed due to risk of oxygen enrichment of your bedding materials.
- If you clean the cylinder do not use any materials which contain ammonium or chlorine compounds.

Cylinder usage chart.

How long will your cylinder last? (in hours unless otherwise stated)

- Note the duration is only approximate and for guidance only.
- If you use a conserving device, the cylinder can last up to 3 times longer than the stated duration.
- If you use different flowrates, please contact us for advice.

Oxygen Cylinder Duration Chart

Nominal duration versus selected flowrate

Size	Flowrate* (lit/min)	Gauge contents*					
		Full (100%)		Half (50%)		Low (25%)	
		Duration (hours)	Duration (Mins)	Duration (hours)	Duration (Mins)	Duration (hours)	Duration (Mins)
ZA	15	0 hr 20 min	20 min	0 hr 10 min	10 min	0 hr 5 min	5 min
Dimensions:	12	0 hr 25 min	25 min	0 hr 12 min	12 min	0 hr 6 min	6 min
L390mm X D85mm	10	0 hr 30 min	30 min	0 hr 15 min	15 min	0 hr 7 min	7 min
Weight (full): 1.75 kg	8	0 hr 37 min	37 min	0 hr 18 min	18 min	0 hr 9 min	9 min
	6	0 hr 50 min	50 min	0 hr 25 min	25 min	0 hr 12 min	12 min
	4	1 hr 15 min	75 min	0 hr 37 min	37 min	0 hr 18 min	18 min
	2	2 hr 30 min	150 min	1 hr 15 min	75 min	0 hr 37 min	37 min
	1	5 hr	300 min	2 hr 30 min	150 min	1 hr 15 min	75 min
	0.5	10 hr	600 min	5 hr	300 min	2 hr 30 min	150 min
	0.1	50 hr	3000 min	25 hr	1500 min	12 hr 30 min	750 min
CD	15	0 hr 30 min	30 min	0 hr 15 min	15 min	0 hr 7 min	7 min
Dimensions:	12	0 hr 38 min	38 min	0 hr 19 min	19 min	0 hr 9 min	9 min
L520mm X D100mm	10	0 hr 46 min	46 min	0 hr 23 min	23 min	0 hr 11 min	11 min
Weight (full): 3.5 kg	9	0 hr 51 min	51 min	0 hr 25 min	25 min	0 hr 12 min	12 min
(please note that the	8	0 hr 57 min	57 min	0 hr 28 min	28 min	0 hr 14 min	14 min
low flow rates are for	7	1 hr 5 min	65 min	0 hr 32 min	32 min	0 hr 16 min	16 min
when a secondary	6	1 hr 16 min	76 min	0 hr 38 min	38 min	0 hr 19 min	19 min
flowmeter is being used)	5	1 hr 32 min	92 min	0 hr 46 min	46 min	0 hr 23 min	23 min
	4	1 hr 55 min	115 min	0 hr 57 min	57 min	0 hr 28 min	28 min
	3	2 hr 33 min	153 min	1 hr 16 min	76 min	0 hr 38 min	38 min
	2	3 hr 50 min	230 min	1 hr 55 min	115 min	0 hr 57 min	57 min
	1	7 hr 40 min	460 min	3 hr 50 min	230 min	1 hr 55 min	115 min
	0.5	15 hr 20 min	920 min	7 hr 40 min	460 min	3 hr 50 min	230 min
	0.1	76 hr 40 min	4600 min	38 hr 20 min	2300 min	19 hr 10 min	1150 min
DD	4	1 hr 55 min	115 min	0 hr 57 min	57 min	0 hr 28 min	28 min
Dimensions:	2	3 hr 50 min	230 min	1 hr 55 min	115 min	0 hr 57 min	57 min
L520mm X D100mm							
Weight (full): 3.5 kg							
DF	4	5 hr 40 min	340 min	2 hr 50 min	170 min	1 hr 25 min	85 min
Dimensions:	2	11 hr 20 min	680 min	5 hr 40 min	340 min	2 hr 50 min	170 min
L690mm X D175mm							
Weight (full): 12 kg							
ZH	15	2 hr 40 min	160 min	1 hr 20 min	80 min	0 hr 40 min	40 min
Dimensions:	12	3 hr 20 min	200 min	1 hr 40 min	100 min	0 hr 50 min	50 min
L595mm X D175mm	10	4 hr	240 min	2 hr	120 min	1 hr	60 min
Weight (full): 14 kg	8	5 hr	300 min	0 hr 18 min	18 min	1 hr 15 min	75 min
	7	5 hr 42 min	342 min	2 hr 51 min	171 min	1 hr 25 min	85 min
	6	6 hr 40 min	400 min	3 hr 20 min	200 min	1 hr 40 min	100 min
	5	8 hr	480 min	4 hr	240 min	2 hr	120 min
	4	10 hr	600 min	5 hr	300 min	2 hr 30 min	150 min
	3	13 hr 20 min	800 min	6 hr 40 min	400 min	3 hr 20 min	200 min
	2	20 hr	1200 min	10 hr	600 min	5 hr	300 min
	1	40 hr	2400 min	20 hr	1200 min	10 hr	600 min
	0.5	80 hr	4800 min	40 hr	2400 min	20 hr	1200 min
	0.1	400 hr	24000 min	200 hr	12000 min	100 hr	6000 min

The cylinder duration times are approximate and are to be used as guidance. The cylinder contents gauge should be checked prior to use to ensure that there is sufficient gas available. These flowrates are intended as a guide only.

*Flowrate +/- 20% cylinder content +/-5% variance from nominal values.

If you are visually impaired and require a copy of the above table in larger print, please contact us and we will be happy to send one out to you.

Cylinder deliveries.

We have a duty of care to ensure that we only deliver the level of oxygen required by your latest prescription. If you should exceed this, our Patient Service Advisor will mention this when you next order.

If you only use oxygen cylinders occasionally, contact us to arrange for a delivery when you start your last cylinder.

Please ensure that all your full cylinders are stored separately from your empty ones to avoid confusion.

Cylinders can be ordered via telephone on 0800 136 603 or online on our website: www.bochomeoxygen.com



Troubleshooting.

Symptom	Possible cause	Solution
No flow.	1. Cylinder valve not open, or clickstop control set to zero.	1. Open cylinder valve and set control to prescribed flow.
	2. Kinked, blocked or split tubing.	2. Remove obstruction if possible. If split tubing, contact us.
	3. Empty cylinder.	3. Change the cylinder.
Low flow.	1. Regulator set incorrectly.	1. Set control to prescribed flow.
	2. Leaks from tubing connections.	2. Refit tubing.
	3. Kinked, blocked or split tubing.	3. Remove obstruction if possible. If split tubing, contact us.
Any other problem or if problem persists.		Contact us immediately on 0800 136 603.

Do's & Don'ts for all cylinder types.

General

- Follow the advice we have given you about where to safely store and use your cylinders.
- Make sure your cylinders are stored in an area where they will not be knocked over. ZA cylinders should be stored laying down all other cylinder types maybe stored upright.
- Ensure your full cylinders are segregated from your empties.
- Make sure you select a full cylinder from your cylinder stock.
- As with any medication, do not leave children alone with the oxygen.

Cylinder valves

- Never use excessive force when opening or closing the cylinder valve.
- Keep cylinder valves closed when not in use.
- Empty cylinders must be stored with the valve closed.

Clear label

- Never paint the cylinders. All labels and markings must remain clearly visible.

Leaks

- If a hissing noise is heard, check for the presence of a leak at the connection between the tubing and the outlet.
- Turn off the cylinder and notify us immediately. Isolate the cylinder.

Back-up cylinder

You will be supplied with a high capacity back-up cylinder for use in EMERGENCY ONLY (such as a power cut). To ensure you have sufficient oxygen in an emergency situation, please do not use this cylinder for any other use.

Faulty cylinders

In the event you experience a fault with your cylinder, please segregate the cylinder immediately and call the Patient Service Centre (PSC) on 0800 136 603. If possible please provide the Patient Service Centre information about the fault so that it can be investigated further. They will arrange for a Patient Service Representative (PSR) to tag and collect your faulty cylinder, which will undergo a full investigation, and also deliver your replacement.

If you are visually impaired and require a large print copy, please contact us.

Contact us.

Our normal working hours are Monday to Friday 8am until 5.30pm.
We are open 24 hours for emergencies only.

BOC Healthcare

Patient Service Centre, Priestley Road, Worsley, Manchester M28 2UT, United Kingdom
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