No more CO2!

shenpix CO2 Free System

Surplus carbon dioxide is not desirable for our health and the earth.

But people with an oxygen mask and oxygen concentrator are taking in carbon dioxide beyond the worldwide standard.

This is the world's first system for taking oxygen in more effectively and more comfortably.



CO2 Free System

shenpix CO2 Free Mask

The nose (air intake) and mouth (exhaled breath=38,000 ppm carbon dioxide) are divided in the CO2 Free Mask; the lower part of the mask opens and excretes the exhaled breath outside. Therefore, the oxygen density in the mask increases.

When using the CO2 Free Mask, we don't take in the high-density carbon dioxide that is in exhaled breath.





shenpix CO2 Filter

This CO2 Filter removes the highly-concentrated carbon dioxide that an oxygen concentrator concentrates with oxygen.

When the concentration rate is $4\sim4.7$ times on the average and carbon dioxide is at 500 ppm in the interior, and carbon dioxide will be at 2,000 \sim 2,350 ppm inside the mask.

We should know we are taking in high-density oxygen and undesirable carbon together.

This concentrated carbon dioxide passes into the CO2 Filter that has a carbon dioxide absorbent, and the density falls to about 140 ppm.





We can surely avoid taking in undesirable high carbon dioxide using the CO2

Free Mask and the CO2 Filter.

shenpix CO2 Absorbent

The CO2 Filter uses a tablet mainly made from calcium hydroxide as a carbon absorbent.

These tablets, which are an excellent quality, are made in Japan under a process patent.

They should be changed once every month. Only use genuine products in the CO2 Filter.

Refer to the back

Conventional oxygen mask

Oxygen flow	Supply oxygen density	Oxygen density in a mask	Carbon dioxide in a mask
2 litres/min	95.5%	21.8%	2,551ppm
4 litres/min	92.4%	28~31%	2,010ppm
8 litres/min	73.8%	26~28%	1,720ppm

CO2 Free Mask

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Oxygen flow	Supply oxygen density	Oxygen density in a mask	Carbon dioxide in a mask			
			CO2 Free Mask	with CO2 Filter		
2 litres/min	95.5%	28~30%	1,440ppm	575ppm		
4 litres/min	92.4%	36~38%	1,080ppm	560ppm		
8 litres/min	73.8%	38~41%	880ppm	525ppm		

Do you know these truth?

Carbon dioxide in the atmosphere is usually $400 \sim 500$ ppm.

The upper limit for carbon dioxide as a worldwide environmental standard in buildings is 1000 ppm.

The carbon dioxide that is in exhaled human breath is about 38,000 ppm. It is much higher than the 400 ppm in the normal atmosphere.

Carbon dioxide in a conventional oxygen mask is $2,000 \sim 3,000$ ppm when putting high density oxygen into the mask at four liters per minute while breathing, and we are taking it in with oxygen.

All oxygen concentrators worldwide concentrate carbon dioxide as well as oxygen at $4 \sim 4.7$ times the normal level.

The relationship between carbon dioxide and health

(There are individual differences between carbon dioxide and health.)

Unpleasantness can be felt at more than 1,000 ppm.

Sleepiness can result at 2,000 ppm.

Headaches or dizziness can be felt at 3,000 ppm.

These truths clearly mean that it is not good to take in surplus carbon dioxide.

Differences between the CO2 Free Mask and conventional oxygen mask

Conventional oxygen masks cover the nose, which takes oxygen in, and the mouth, which excretes exhaled breath containing 38,000 ppm carbon dioxide; high-density carbon dioxide is stopped in our mask. When oxygen is put in our mask, the carbon dioxide density becomes weak.

In a conventional oxygen mask, carbon dioxide with $2.000 \sim 3.000$ ppm still remains, and the undesirable high-density carbon dioxide is still being taken in.

shenpix co2 Free Mask

When using the CO2 Free Mask, please breathe in by the nose and breathe out by the mouth as much as possible. This is a healthy breathing method too.

As the lower part of the mask opens, there is no inconvenience in conversation. We recommend using the CO2 Free Mask for people who use a cannula.

If breathing in and out by the nose, carbon dioxide will be taken in as much as a conventional oxygen mask.

The person who can only breathe through the mouth can't use this mask.

shenpix co2 Filter

Our CO2 Filter removes concentrated carbon dioxide from oxygen by an oxygen concentrator.

The principle of all oxygen concentrators is the same. Only nitrogen is being taken from the air, while oxygen and carbon dioxide are being concentrated.

The CO2 Filter can easily be connected to an oxygen concentrator anywhere in the world.

The carbon dioxide absorbent needs some moisture to maintain its capacity, so please connect the humidifier attached to the concentrator to the CO2 Filter.

Batteries and other power sources are unnecessary.

shenpix co2 Absorbent

The CO2 Filter uses a tablet mainly made from calcium hydroxide as a carbon dioxide absorbent.

One hundred grams of calcium hydroxide tablets are put in the CO2 Filter.

These tablets, which are an excellent quality, are made in Japan under a process patent.

The tablets of calcium hydroxide have been used in the medical field for quite some time. It is a kind of food additive, so it can be used safely.

The normal effective period for the calcium hydroxide is about one month after putting them in the CO2 Filter. They should be changed once every month.

When the absorbent capacity falls, the tablets become a light purple. At this time, the tablets should be changed before the effective period ends.

Please don't keep the absorbent for more than one year to avoid degradation in quality.

Since they are alkaline, don't let the fine powder of the absorbent come in contact with skin. Wash your hands after touching the absorbent, so the fine powder doesn't come in contact with eyes.

Nonetheless, even if it's licked, it's harmless.

Only use genuine products in the CO2 Filter.

Then Ladies and Gentleman, take in and enjoy the highly-concentrated oxygen effectively and comfortably, please.



