

THE HELIOS PORTABLE UNIT

MOST FREQUENTLY ASKED QUESTIONS

Q. What should I do if I spill liquid oxygen on my skin?

- A. 1. Flush the area of skin that was affected with a large amount water for at least 15 minutes.
- 2. Contact your physician.

Q. What is the proper method for filling the HELIOS Portable Unit?

- A. 1. Use a clean, dry cloth. Wipe the male connector on the reservoir and female connector on the portable unit to ensure both are dry. This helps prevent the units from freezing together during the fill process.
- 2. Hold the Helios Portable Unit with one hand and position the contoured case over the recessed area on top of the reservoir.
- 3. Carefully lower the portable unit into place, ensuring that the fill connectors are properly engaged.
- 4. Place one hand on top of the portable unit handle directly over the fill connector and press straight down (being careful not to depress the release button on the reservoir when engaging). While holding the portable unit in the fill position, pull the vent lever and hold down in the open position. A hissing noise should be noticeable. During the fill process maintain a downward pressure on the handle with one hand to keep unit engaged and steady.
- 5. When a change is noticed in the sound of venting gas, followed by a dense vapor coming from the reservoir cover, close the vent valve.
- 6. After the vent valve is closed, disengage the portable unit from the reservoir unit by lifting upward. Depress the release button if required.

If the units do not disengage easily, they may have become frozen. **DO NOT USE FORCE.** Allow a few minutes for the frozen parts to warm, then disengage. Continuing to fill the unit will not add oxygen. Reference HELIOS Instructions for additional information.

Q. How do you determine if the HELIOS Portable Unit is full after filling?

- A. Let set 5 to 10 min. Check the oxygen contents indicator to ensure the portable unit is filled to the desired level. To operate the contents indicator, use one hand to lift the HELIOS Portable Unit by the contents indicator strap. You will notice that the top of the unit is slightly tipping forward. With your other hand, gently press the bottom backside of the portable unit so that it is at a 90-degree angle to the floor. The green bar inside the clear window displays the liquid oxygen contents level.

Q. Why is it important to dry the connectors before filling the HELIOS Portable Unit?

- A. It is important to wipe the connections on the portable and reservoir units dry before filling the portable unit to help prevent the units from freezing together during the fill process.

Q. What would cause the HELIOS Portable Unit not to pulse after filling?

- A. The built-in pneumatic conserving device requires a designated amount of pressure within the portable unit to operate. If during the filling process, the unit is disengaged, with the vent valve lever down, pressure may be reduced within the portable unit causing a delay in the conserving device function. Within several minutes, the pressure within the portable unit should increase to adequately operate the conserving device. Additionally, improper filling or pressure (lower than standard operating pressure) in the reservoir will contribute to the unit not pulsing.



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Q. How long does a HELIOS Portable Unit last at various flow settings?

A. The following table shows the approximate use time of a full portable unit.

WARNING: YOUR USE MAY VARY

Flow Control Knob Setting	Approximate Use Time
0	Not Applicable
.12	15 Hours
.25	15 Hours
.5	10 Hours
.75	6.5 Hours
1	13 Hours
1.5	12 Hours
2	10 Hours
2.5	8.5 Hours
3	6.5 Hours
3.5	6 Hours
4	5 Hours

Q. What factors contribute to a HELIOS Portable Unit lasting more or less than a full 10 hours?

A. Varying levels of activity/breathing rates can impact the length of time the HELIOS Portable Unit will continue to provide oxygen. The unit is designed to last approximately 10 hours at a flow setting of 2.

Q. Should the HELIOS Portable Unit be filled immediately before going to bed?

A. No. The HELIOS system is designed to build pressure as liquid oxygen evaporates. It is important to breathe down the pressure in the reservoir through the supply line. If the portable unit is filled shortly before it is hooked up to the reservoir, the reservoir pressure will not be drawn down as much and it will start venting oxygen sooner.

Q. Why does a HELIOS Portable Unit hiss during use?

A. Hissing can occur to maintain the correct operating pressure within the portable. It is most likely to hiss after filling or when the position of the portable is changed. Hissing can last for approximately 10 minutes after filling. Additionally, it can occur when flow control valves are at a low setting. It may hiss if it is filled and not used.

Q. What factors contribute to frost occurring on the HELIOS Portable Unit?

A. The warming coils within the unit will frost in the process of warming the liquid oxygen into a gas. A thin layer of frost is likely to occur during use. Immediately after filling a portable unit, the fill connector and vent valve can have a thin layer of frost. During use, the coils visible from the front of the portable unit may be slightly frosted. Humid climates can also contribute to frost formation. Frost is a normal occurrence with liquid oxygen systems and can be expected. If frost is caked and extending beyond the portable casing, do not intervene. Contact your homecare provider. Keep in mind, extended contact with frosted surfaces on liquid oxygen systems may cause frostbite.

Q. What causes water to drip from the HELIOS Portable Unit?

A. During evening hours when the supply line is in use, small amounts of water (melting frost) may leak from the unit. It is recommended that a *protective collection device*, such as a towel, be placed under the portable unit if resting on a non water resistant surface.

Q. Why are there no continuous flow settings above 3/4 LPM on the HELIOS Portable Unit?

A. The HELIOS Portable Unit would not be able to provide oxygen for long periods of time if continuous flow was provided at settings above 3/4 LPM.

Q. What factors can be evaluated to determine why the HELIOS Portable Unit has stopped pulsing?

- A.**
- Ensure that both connections of the dual cannula are firmly attached to the portable oxygen outlet and sensor connectors.
 - Determine if there are water droplets in the cannula. Water droplets from humidified exhaled gas are normal. If there is some difficulty with the unit not pulsing in conjunction with water droplets in the cannula, consider changing the cannula, replacing with a dry cannula to enhance the ability of the device to pulse.
 - Ensure that the cannula is not kinked.
 - Ensure there is oxygen in the portable unit.
 - With the cannula on, close your mouth and breathe only through your nose to verify that the portable unit has stopped pulsing.

Q. What can be done with a vent that does not close properly during the filling process?

- A.** If the vent fails to close and the hissing continues, remove the portable unit by depressing the release button on the reservoir. The portable unit will stop venting in a few minutes. Allow the unit to warm until you can close the vent valve. The portable unit may require as much as 60 minutes to restore adequate pressure for accurate oxygen flow.

Q. What can be done with a HELIOS Portable Unit that is not filling?

- A.** Verify that there is oxygen in the reservoir and the fill connectors are fully engaged. If not, contact Carle Medical Supply for refill or to check your reservoir.

Q. What kind of cannulas do you use on the HELIOS Portable Unit ?

- A.** Nellcor, Puritan Bennett cannulas # 778058-00 only.