



# SPERIAN Model 1688 CN/CS/P100 Canister User Instructions

The Model 1688 canister is NIOSH approved for use only with SPERIAN Model 7530/7630/7730/7590/7690/7790 Opti-Fit Gas Mask, and provides protection against chloroacetophenone (CN), o-chlorobenzylidene malononitrile (CS), and P100 particulates. **You must read and understand these user instructions and the user instructions provided with the gas mask facepiece assembly before using.**

 <b>WARNING</b>	
<ul style="list-style-type: none"><li>• <b>A gas mask will reduce, but will not eliminate the inhalation of contaminants and microorganisms.</b></li><li>• <b>Before using your gas mask, you must read and understand these warnings, limitations, and instructions, and the user instructions provided with the gas mask facepiece assembly. The gas mask must be worn and used as specified in the user instructions. No gas mask can provide complete protection from all conditions.</b></li><li>• <b>The gas mask must be used for protection against only those contaminants listed on the canister and/or the NIOSH approval label. Be certain that the canister will provide the required protection.</b></li><li>• <b>Gas masks do not provide oxygen. Do not use in atmospheres containing less than 19.5% oxygen by volume.</b></li><li>• <b>Do not use a gas mask in environments where the concentration of contaminants is unknown or are immediately dangerous to life or health.</b></li><li>• <b>The gas mask shall not be used underwater, for fumigation, interior structural fire fighting, abrasive blasting operations, or in areas where high heat, sparks, or flames could contact the gas mask.</b></li><li>• <b>The gas mask must be used in conjunction with a written respirator program meeting the requirements of the OSHA Standard for Respiratory Protection, 29 CFR 1910.134, available from the U.S. Department of Labor, Occupational Safety and Health Administration.</b></li><li>• <b>The gas mask must be properly fitted to the individual to ensure proper protection. Facepiece fitting is the user's responsibility. See the latest issues of ANSI Z88.3 and OSHA 29 CFR 1910.134.</b></li><li>• <b>Beards, stubble, or sideburns will prevent a proper facepiece-to-face seal, and facial hair may interfere with valve function. Do not use the gas mask unless you are clean shaven. Absence of one or both dentures, the presence of deep facial scars, etc., can seriously affect the fit of the facepiece.</b></li><li>• <b>Immediately return to a non-contaminated area if you taste or smell contaminants; your eyes, nose, or throat become irritated; breathing becomes difficult; the air you are breathing becomes uncomfortably warm; you feel nauseous or dizzy; you notice a loss or decrease in airflow; or the facepiece moves, slips, or leaks.</b></li><li>• <b>A gas mask does not protect exposed areas of the body. Some contaminants can be absorbed directly through the skin while others may burn or irritate exposed areas.</b></li><li>• <b>Do not alter, modify, or misuse this canister or your gas mask.</b></li></ul>	

 <b>WARNING-Continued</b>	
<p><b>Do not use the gas mask at ambient temperatures above 130°F (55°C).</b></p> <ul style="list-style-type: none"><li>• <b>The gas mask facepiece assembly contains natural rubber latex, which may cause allergic reactions in some individuals. Discontinue use if you experience an allergic reaction.</b></li><li>• <b>Discontinue use if you experience skin irritation or discoloration.</b></li><li>• <b>Do not use this canister or your gas mask if it has been left exposed in a contaminated environment. Contaminants can collect on the inside of the facepiece and be inhaled when the gas mask is donned.</b></li><li>• <b>For use by trained, qualified personnel only.</b></li><li>• <b>The gas mask may provide less than adequate protection if improperly used, resulting in serious personal injury, serious illness, or death.</b></li></ul>	


## I. CANISTER INSTALLATION

Do not remove the canister from its packaging until it is to be used. The canister can be either installed front-mounted in the nozzle or side-mounted on either side of the lens.

### Side-Mount/Front-Mount Installation

1. Verify that the canister is within its service life by inspecting the expiration date on the right side of the canister label.
2. If installed, remove the plug from the front of the nozzle or the side canister connector. Use a quarter or similar item to unscrew the plug. Do not use a screwdriver as it may damage the plug.
3. Remove the canister from its protective poly/foil bag. Remove the plug from the top of the canister and the cap from the threaded end. Discard the cap, plug, and poly/foil bag.
4. Thread the canister into the nozzle or canister connector and hand-tighten. Do not overtighten.
5. If not installed, thread a plug into the two unused connectors. Hand-tighten with a quarter or similar item. Do not overtighten.

## II. CANISTER SERVICE LIFE

 <b>WARNING</b>	
<ul style="list-style-type: none"><li>• <b>OSHA allows the use of respirators for protection against contaminants with poor warning properties. You must replace the canister in accordance with an OSHA compliant canister change-out schedule that is based on objective information or data that ensures the canister is changed before the end of its service life.</b></li></ul>	



### WARNING-Continued

- **You must immediately leave the contaminated area if you taste or smell contaminants, or if your eyes or throat become irritated. Replace the canister before re-entering the contaminated area.**
- **You must replace the canister when breathing becomes uncomfortable or difficult. As particulates collect on the filter surface, the breathing resistance of the gas mask increases. If you wait too long to replace the canister, particulates may leak past the face seal instead of being collected on the filter; therefore, SPERIAN recommends that the canister be changed at least daily.**
- **Establishing the canister service life for mixtures of contaminants is a complex task and one that requires considerable professional judgement to create a reasonable change schedule. OSHA provides a "rule-of-thumb" method for determining the canister service life for mixtures. The method addresses two situations. The first is where the individual compounds of the mixture have similar breakthrough times (e.g., within one order of magnitude). In this case OSHA recommends adding the concentrations of all the components of the mixture to determine a "total concentration", then determine the mixture service life by applying the total concentration to the component with the shortest service life. The second is where the individual compounds have breakthrough times that vary by 2-orders of magnitude or greater. In this case, OSHA recommends the mixture service life be based on the contaminant with the shortest breakthrough time. The OSHA rule-of-thumb methods may not be applicable for all mixtures. In some cases the actual mixture service life may be much lower than the one calculated. For this reason, SPERIAN recommends using experimental methods. If you are unsure how to determine the canister service life for mixtures please contact SPERIAN.**
- **Failure to comply with this warning may lead to serious personal injury, serious illness, or death.**

The gas/vapor service life depends on the user's breathing rate, the characteristics of the contaminant, and environmental conditions such as temperature and humidity. A saturated canister will leak trace amounts of contaminant to the wearer, which may be detected by odor, taste, and/or irritation. Replace the canister in accordance with an OSHA compliant canister change-out schedule or earlier if you detect the contaminant by that the canister service life for mixtures be determined smell, taste, or irritation, or if they show any signs of damage. The canister should always be replaced in accordance with schedules established by regulatory agencies, and disposed of in accordance with Federal, state, and local guidelines. Always replace the canister with one taken from a sealed package.

The particulate filter service life depends on the user's breathing rate, the characteristics of the contaminant, and environmental conditions such as humidity. The particulate filter used in the canister is NIOSH approved for long duration use against any type of particulate. When used in oil-containing (e.g., lubricants, cutting fluids, glycerin, etc.) or non-oil-containing atmospheres, the canister must be replaced immediately whenever it is damaged, soiled, soaked with liquids such as water or alcohol, the canister appears to be suspect in any manner, or when the user notices an increase in breathing resistance such that the gas mask becomes uncomfortable to wear.

If none of the above occurs and there is a respiratory protection program per OSHA 29 CFR 1910.134 in place, then the canister may be used continually, but only for a maximum of 30 days or 40 hours, whichever comes first. However, the service time can be extended if filter performance to 42 CFR Part 84 can be demonstrated. Whether used in oil-containing or non-oil-containing atmospheres, SPERIAN recommends the canister be replaced daily because the user may be unable to detect small defects in the canister filter resulting in a loss of filter efficiency, and the determination of when breathing resistance becomes too uncomfortable is subjective.

### III. ADDITIONAL INFORMATION

If you need assistance or additional information on any SPERIAN product, consult your local distributor or contact:

**SPERIAN**  
3001 S. Susan Street  
Santa Ana, CA 92704  
(714) 545-0410 or (888) APR-SCBA  
FAX (714) 850-0299

### IV. WARRANTY AND LIMITATION OF LIABILITY

**LIMITED WARRANTY:** SPERIAN warrants this product to be free from defects in materials and workmanship for as long as it has been stored in its original SPERIAN packaging before use. During this period, SPERIAN will repair or replace defective parts, at SPERIAN's option. The purchaser shall pay freight charges to and from the SPERIAN factory.

**EXCLUSIONS:** NOTWITHSTANDING ANY CONTRARY TERM IN THE PURCHASER'S PURCHASE ORDER OR OTHERWISE, THE ONLY WARRANTY EXTENDED BY SPERIAN IS THE EXPRESSED LIMITED WARRANTY DEFINED ABOVE. THIS WARRANTY IS EXCLUSIVE AND IN LIEU OF ANY IMPLIED WARRANTY OF MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE.

**CONDITIONS:** To maintain this warranty, this product must be used, maintained, and inspected as prescribed in the owner's instruction manual, including prompt replacement or repair of defective parts and such other necessary maintenance and repair as may be required. Normal wear and tear; parts damaged by abuse, misuse, negligence, or accidents; and inhalation and exhalation valves are specifically excluded from this warranty.

**LIMITATION OF LIABILITY:** No other oral warranties, representations, or guarantees of any kind have been made by SPERIAN, its distributors, or the agents of either of them, that in any way alter the terms of this warranty. **EXCEPT AS HEREIN PROVIDED, SPERIAN SHALL HAVE NO LIABILITY FOR ANY LOSS OR DAMAGE, WHETHER DIRECT, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL, TO ANY PURCHASER OR USER OF THIS PRODUCT ARISING FROM THE SALE, USE, OR OPERATION OF THIS PRODUCT.**



