

STANDARD INFORMATION

Standard: UL 979

Standard ID: Water Treatment Appliances [UL 979:2025 Ed.4+R:26Jun2025]

Previous Standard ID: Water Treatment Appliances [UL 979:2025 Ed.4]

EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

Effective Date: June 26, 2027

IMPACT, OVERVIEW, AND ACTION REQUIRED

Impact Statement: Per our accreditation, Intertek is required to review reports against the standard revisions to confirm compliance. Once compliance is confirmed, the standard reference in the report is updated to show continued compliance to the technical requirements of the standard. Reports not updated to this version by the effective date above will be withdrawn.

This standard contains Functional Safety requirements.

Overview of Changes: Additional requirements for water treatment systems that include ozone generation and a water faucet. Specific details of new/revise requirements are found in table below.

Current Listings Not Active? – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records. We will do this at no charge as long as Intertek is notified in writing prior to the review of your reports.



STANDARD INFORMATION

CLAUSE	VERDICT	COMMENT
<i>New section added;</i>		
50A		Ozone Offgas Test for Systems That Include Ozone Generation and a Water Faucet
50A.1		A system that includes Ozone generation and a water faucet shall be subjected to ozone offgas test as specified in 50A.2 – 50A.12.
50A.22		The ozone offgas test is to be conducted in a smoke-free, draft-free, non-ventilated, relatively airtight insulated room which is maintained at 50 ± 5 % relative humidity while at $20 - 30$ °C ($68 - 86$ °F) for 30 minutes prior to the start of the test. The test room is to be approximately 1000 cubic feet (approximately 8 by 10 by 12 feet) with all interior surfaces covered with a material that does not react with ozone. The door to the test room is to be sealed during the test.
50A.3		The device to be tested is to be located in the approximate center of the test room and connect to unheated tap water or the system recommended by the manufacturer.
50A.4		A freshwater sample is to be used Ozone test probes are to be located as indicated in 50B.1 – 50B.3.for each test.
50A.5		Ozone offgas is to be measured using an ozone monitor that takes at least 1 measurement every 10 – 15 seconds with a minimum range of 0.03 – 5.0 parts ozone per million parts air (PPM) increments with an accuracy within ± 5 %. All test equipment is to be located outside the test room. All plumbing is to maintain the airtight integrity of the test room. Prior to each test, the ozone monitor is to be purged and calibrated according to the monitor manufacturer's instructions.
50A.6		Ozone measurements are to be taken 5 minutes before the test (Ambient Reference Level) and then continuously for 60 minutes minimum (Operating Level) and continued until 5 minutes after the test (Post Test Level). During the test, the device (i.e. faucet) and the ozone generator are to be operated to maximize ozone offgas.
50A.7		Ozone measurements made during the test specified in 50A.6 shall not exceed the limits specified in 50A.9 and 50A.10.
50A.8		Ozone measurements made during the 5 minutes after the test (Post Test Level) shall not exceed the transitory offgas limits specified in 50A.10.
50A.9		The Operating Level of ozone shall not be greater than the Ambient Reference Level plus 0.09 parts ozone per million parts air (PPM) averaged over 60 minutes time-weighted averaging (TWA).
50A.10		The maximum transitory ozone concentration shall not exceed 0.25 PPM 1 minute time-weighted averaging (TWA).



CLAUSE	VERDICT	COMMENT
50A.11		Faucets shall be installed over stainless steel single basin sink having depth of 10 inches maximum, and volume of 3000 cubic inch maximum. During the test, water shall be directed to side of the drain to ensure smooth flow of water and reduce splashing.
50A.12		During the test, water shall be running through the faucet and ozone generated for the maximum duration as the product design allows, taking into account inherent duty cycles or timing.
50B		<i>New section added;</i> Peak Ozone Emission Point Determination on Faucet
50B.1		Prior to testing as described in 50A.1 – 50A.12, the location of the peak ozone emission (i.e., worst case ozone concentration point) of the test specimen shall be determined in accordance with 50B.2.
50B.2		To determine the location of the peak ozone emission, the test specimen shall be operated for 10 consecutive minutes, and the ozone concentration shall be measured at Points 1 and 2 in Figure 50.1, as follows: a) The measurement at Point 1 shall be taken 2 inches (50 mm) from the inner edge of the sink, outside of the sink edge, even with faucet base. b) Point 2 shall be directly above Point 1 and at a height even with the faucet outlet.
50B.3		The measurements may be conducted all at once, in multiple stages, or individually, when only one location can be measured at a time.

Figure 50.1

