

SKW recommendation

On the use of ozone and ozonized water for cleaning

There are technologies that use ozonized water to clean and disinfect dishes, textiles and surfaces. Some providers of these technologies advertise the use of tap water and a “natural and chemical-free” cleaning and disinfection process using ozone generated on site.

It should be noted that ozone is a chemical with significant potential hazards for humans and the environment. Ozone must not be supplied to private individuals. The utmost attention must be paid to safe use by professional users. In addition to safety precautions, an ozone management system must be used to ensure the protection of employees, the environment and materials (surfaces, utensils, equipment, textiles).

Joint recommendations from SKW and IHO*

- Ensure correct application.
- Test the cleaning performance of ozonated water in comparison to existing cleaning processes and, if necessary, pure water.
- Validate the disinfection performance in the application environment in accordance with applicable standards.
- Risk assessment to determine whether
 - o appropriate (quantitative) measurement techniques are needed to confirm the presence of ozone in the solution and to detect and minimize the occurrence of ozone in the ambient air.
 - o technical measures, such as ventilation and air-conditioning systems, are necessary
 - o personal protective equipment (gloves, masks) is necessary
 - o the workplace must be checked for compliance with the maximum workplace concentrations.
- The reliability of the ozone generators and the warning systems must be ensured, and an emergency plan for system failures must be drawn up.
- The long-term compatibility of ozonated water on the surfaces and equipment used must be tested.
- Conducting an assessment of the actual savings (costs, cleaning chemicals) when using ozone

January 21, 2025, Dr. Bernard Cloëtta, SKW Director General

*IHO, German Industrial Association for Hygiene and Surface Protection for Industrial and Institutional Applications, for further information see the [IHO brochure “Ozone is chemistry”](#).