






XEN

Chemistries
for the ultimate
peace of mind

Recommended Use Temperatures

Product Name	Product Image	Temperature Range °F	Temperature Range °C
Xcelerate		Ambient temperature	Ambient temperature
QuadX		77°F–113°F	25°C–45°C
Enzymatic		77°F–113°F* Manual/Sonic 112°F–140°F Automated	25°C–45°C* Manual/Sonic 50°C–60°C Automated
Enzymatic+		77°F–113°F* Manual/Sonic 112°F–140°F Automated	25°C–45°C* Manual/Sonic 50°C–60°C Automated
Neutral		77°F–113°F* Manual/Sonic 112°F–140°F Automated	25°C–45°C* Manual/Sonic 50°C–60°C Automated
Neutral+		77°F–113°F* Manual/Sonic 112°F–140°F Automated	25°C–45°C* Manual/Sonic 50°C–60°C Automated
Universal		112°F–140°F	50°C–60 °C
Universal+		112°F–140°F	50°C–60 °C

Rinse		>122°F	>50°C
Instrument Lubricant+		<77°F Manual >122°F Automated	25°C Manual >50°C Automated
Chamber Shine+		Ambient Temperature	Ambient Temperature
Instrument Shine		Ambient Temperature	Ambient Temperature
Chamber Shine		Ambient Temperature	Ambient Temperature

* It is recommended that the temperature of manual and ultrasonic cleaning chemistries, along with pre-wash cycles in washer-disinfectors does not exceed 113°F (45°C). Higher temperatures can cause proteins (such as those found in blood soils) to coagulate, making them harder to remove. For this reason, the XEN Products IFU specifies a lower temperature than the maximum recommended temperature in some ultrasonic manufacturer's IFU's

Lower wash temperatures are considered best practice for all manual and ultrasonic cleaning, as they help maintain protein solubility, support effective detergent or enzymatic action and reduce the risk of baked-on contamination. This promotes thorough soil removal and improves the efficiency of the sterilization process.

This is recognized by the UK Department of Health and Social Care (HTM 01-05, 2013 and HTM 01-01, 2016)^{1,2}, the International Organization for Standardization (ISO 15883-1:2025, section 4.2.3)³, the World Federation for Hospital Sterilisation Services (Cleaning & disinfection guidelines, section: Ultrasonic)⁴, and ANSI/AAMI ST79: Comprehensive Guide to Steam Sterilization and Sterility Assurance (ST79 section 7.6.4.2)⁵.

References

1. HTM 01-05: Department of Health and Social Care (2013) Health Technical Memorandum 01-05: Decontamination in primary care dental practices. London: Department of Health and Social Care. Available at: <https://www.england.nhs.uk/publication/decontamination-in-primary-care-dental-practices-htm-01-05/> (Accessed: 6 August 2025).
2. HTM 01-01: Department of Health and Social Care (2016) Health Technical Memorandum 01-01: Management and decontamination of surgical instruments used in acute care. London: Department of Health and Social Care. Available at <https://www.england.nhs.uk/publication/decontamination-of-surgical-instruments-htm-01-01/> (Accessed: 6 August 2025).
3. ISO 15883-1: International Organization for Standardization (2025) Washer-disinfectors – Part 1: General requirements, terms and definitions and tests. ISO 15883-1:2025. Geneva: ISO.
4. WFHSS: World Federation for Hospital Sterilisation Sciences (WFHSS) WFHSS cleaning & disinfection guidelines for reusable medical devices. [online] WFHSS. Available at: <https://wfhss-guidelines.com/cleaning-disinfection/> (Accessed 6 August 2025).
5. ANSI/AAMI ST79: Comprehensive Guide to Steam Sterilization and Sterility Assurance (ST79 section 7.6.4.2)