

## PROCEDURE FOR THE DISINFECTION OF NON-INVASIVE MEDICAL DEVICES WITH 99T SYSTEM

99S solution has a bactericidal, fungicidal, virucidal and sporicidal activity which has been confirmed in compliance with the relevant EN standards: EN 1040, EN 1276, EN 13697, EN 1275, EN 1650, EN 13704, EN 14476, EN 13623, EN14348, EN 13727, EN 13624, EN 16777 and EN 17126.

99 Technologies has validated two disinfection protocols of 1 ml/m<sup>3</sup> and 3 ml/m<sup>3</sup> respectively for the ordinary and preventive disinfection of medical equipment's surfaces within the medical area. These protocols have been validated following the NF T72-281 methodology in order to reach specific microbial reductions respectively of 2 Log (99%) and 3 Log (99,9%), taking into consideration the fact that, on the basis of the data available in scientific literature, the microbial contamination present on non-invasive medical devices is on average between 0 and 500 CFU (average of 82.1 CFU) [1].

The protocols have been validated against selected reference bacteria, including *Staphylococcus aureus*, considered as one of the most resistant microorganisms to hydrogen peroxide as it is a catalase producer, capable of splitting hydrogen peroxide into water and oxygen.

DOSAGE (ml/m <sup>3</sup> )	CONTACT TIME (min)	REFERENCE VALIDATED PROTOCOL	
		LOGARITMIC REDUCTION	MICROORGANISMS TESTED
1	30	>2Log	<b><u>Bacteria</u></b> <i>Pseudomonas aeruginosa</i> <i>Staphylococcus aureus</i> <i>Salmonella thyphimurium</i> <i>Staphylococcus aureus MRSA</i> <i>Acinetobacter baumannii</i> <i>Enterococcus faecium VRE</i> <i>Klebsiella pneumoniae KPC</i>
3	60	>3Log	

**REUSE TIMES:** before reusing the room, observe an aeration time of at least 15 minutes, which can be started 15 minutes before the end of the contact time (i.e. after 15 minutes from the end of the nebulization when it is applied a 1ml/m<sup>3</sup> treatment and after 45 minutes from the end of the nebulization when it is applied a 3ml/m<sup>3</sup> treatment).

### Bibliography:

- Schabrun, S and Chipchase L “*Healthcare equipment as a source of nosocomial infection: a systematic review.*” Journal of Hospital Infection (2006) 63(3), 239–245.