



GAS-CHEX® ETHYLENE OXIDE STERILIZATION TAPE – TECHNICAL INFORMATION

January 23, 2017

Product Name: Propper Gas-Chex® EO Sterilization Tape

Reorder number: 26801500, Tape, ¾ Inches (19 mm) x 60 yards (55 m), 48 RL/CS

Product description:

- This is a pressure sensitive tape available in 1/2, 3/4 and 1 inch (12.5 19 and 25 mm) width designed to secure sterilization packages and imprinted with a process indicator – Ethylene Oxide reactive ink. The word “Gas” printed with reactive ink changes color when exposed to EO sterilization. The tapes are intended to demonstrate exposure to Ethylene Oxide sterilization process and distinguish processed and not processed sterilization packs or items. The color change should not be interpreted as indications of the adequacy of the sterilization cycle. The tape substrate has beige color which does not change during EO sterilization, and will accept writing by ball-point pens or pencils.
- Physical parameters: The core size is 3 inches (7.5 cm), and it fits any standard dispenser of appropriate size. Each roll of tape is individually wrapped with plastic.
- Materials: The Gas-Chex® EO Autoclave Tapes are made with crepe paper. The outer surface of the paper is printed with reactive ink and coated with a protective layer. The lower surface is coated with latex-free and DNR-free adhesive.



Color change: The unprocessed indicator color is burgundy or brown. It will turn green (any shade of green color or yellow-green) after exposure to EO sterilization. After EO exposure, if the tape is stored within recommended temperature 15°C-30°C (59°F-86°F) and RH 35-60% ranges in a dark place, the green color will last for at least 3 years with tendency of very slow fading.

Performance: Propper Gas-Chex® tape conforms to the requirements of ISO 11140-1:2014, Type 1 indicator. Performance of the tape indicator has been validated in EO Joslyn resistometer (BIER vessel) conforming AAMI/ISO 18472:2006 - Sterilization of Healthcare Products – Biological and Chemical Indicators – Test Equipment.

Test parameters and results:

Temperature	Relative Humidity	Sterilant concentration	Indicator should not change to green	Indicator should change to green	Gas-Chex tape result
37°C	60±10%	600 mg/l±30	3 min	25 min	Conforms
54°C	60±10%	600 mg/l±30	2 min	20 min	Conforms
60°C	85±10%	No sterilant	90 min	N/A	Conforms

Material safety:

- The Gas-Chex® tape indicator ink does not contain any lead or heavy metals. During normal use, before and after, EO sterilization tape does not release ink chemicals.
- Adhesive: latex and DNR-free.

Technical data:

Parameter	Typical value	Range
Thickness	0.17 mm (6.7 mils)	0.155-0.175 mm
Peel Adhesion	8 N/25mm (30 oz/in)	6-10N/25 mm
Tensile Strength	90 N/25mm (20 lb/in)	75-95 N/25 mm
Elongation	7%	6-8%

Storage conditions: Temperature 15°C-30°C (59°F-86°F): RH 35-60%.

Shelf life: 18 months.