



PRE-KLENZ™ SUBSTRATE COMPATIBILITY WITH ENDOSCOPE PARTS

PURPOSE

PRE-Klenz is a ready-to-use neutral pH gel. It is designed to keep organic soil moist on reusable medical equipment such as flexible and rigid endoscopes and surgical instruments prior to decontamination. The purpose of this study was to determine the compatibility of PRE-Klenz with a variety of substrates used in endoscope parts. The scope of the study was limited to materials compatibility.

METHODS

Static Immersion

Substrate compatibility testing was conducted on a variety of plastic and metal endoscope parts. The scope parts were subjected to static immersion in PRE-Klenz for 72 hours at ambient room temperature. The parts were then cleaned and patted dry and allowed to air dry for 24 hours and weighed. The parts were examined for physical changes such as discoloration, clouding, bubbling, cracking, tackiness, swelling, and corrosion (metals). The endoscope parts were also evaluated for weight gain or loss.

72-Hour Dried-On Exposure

When the gel was applied to cover the surface of the endoscope parts and allowed to stand for 72 hours, the subsequent cleaning of the parts did not reveal any changes in the appearance. PRE-Klenz is compatible for 72 hours of continuous exposure.

RESULTS

Under static immersion conditions in PRE-Klenz, the weight loss/gain was found to be less than 1% for all of the endoscope parts. There were no physical changes in appearance or integrity of the parts under both static immersion and dried-on conditions with PRE-Klenz. PRE-Klenz is compatible with the following endoscope parts that contain a variety of plastic and metal substrates:

Stainless-steel screws	c-covers (ultem)
Boot extenders (anodized aluminum)	distal lens (CGL-03)
O-rings (Buna N, 55 durometer)	bending rubber (viton)
Bending rubber (silicone)	switch head (silicone rubber buttons)
Control body grip (brass or copper ring)	biopsy channel (ePTFE)
Suction channel (Teflon)	OEM insertion tube (polyurethane, steel, brass)

CONCLUSION

PRE-Klenz was found to be compatible with all of the various endoscope parts tested under extended exposure conditions and under wet and dried conditions.

References

Research and Development Notebook number 5912: 5-9.

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