## UV-C and Surface Compatibility



The UVDI-360 Room Sanitizer has no known surface compatibility issues when used as directed. Although UV-C, like any form of light, can in theory cause cosmetic surface changes to some materials with heavy long term exposure, in practice UVDI has not observed any cases of discoloration or damage on hospital surfaces or equipment from the use of our UV-C system. UVDI has conducted UV-C degradation testing on a wide range of materials commonly found in a hospital setting and found no damage upon exposure to UV-C.

## **UV-C Compatibility Rating System**



## 3-Star System



No visible surface damage or effect on the material is likely to occur when used according to manufacturer's instructions. Some surface aesthetic impact such as slight discoloration or etching may be seen with long term<sup>†</sup> exposure, but no change to the integrity of the material is expected.



Some surface aesthetic impact such as slight discoloration or etching may be seen with short term<sup>‡</sup> exposure. Little to no effect on material integrity is expected. Minimizing exposure by running the device for the shortest manufacturer recommended cycle times can help minimize impact.



Visible damage to the surface is likely to occur with short term exposure and some effect on material integrity is possible. Minimizing exposure by running the device for the shortest manufacturer recommended cycle times can help minimize impact. Users should evaluate the risk of surface damage vs. the benefits of UV-C efficacy against microorganisms to determine whether the product is appropriate for use on these materials.

<sup>†</sup>Long term exposure is defined as more than 3 years of standard patient room terminal cleaning. Testing was conducted up to the equivalent of 13 years of standard patient room use.

\*Short term exposure is defined as 3 years or less of standard patient room terminal cleaning.

## UV-C Materials Compatibility

	Surface	Examples	UVDI-360 Room Sanitizer
Polymers	Computer Monitor	Electronic screens	***
	High-Density Polyethylene (HDPE)	Packaging, trays, bottles, and other industrial plastic products	***
	Acrylics (PMMA)	Phone displays, incubators, X-ray protective shields, isolettes	**
	ABS	Keyboards, pumps, medical devices for blood access, enclosures for electrical and electronic assemblies	**
	Polycarbonate (PC)	Medical devices	**
	Polyethylene terephthalate (PET)	Typical hard molded plastic used for bottles, trays, device exteriors	***
	Polypropylene (PP)	Hard molded plastic used for bottles, trays, device exteriors	**
	Polyurethane (PU)	Upholstery, lights, tubing, mattress covers	***
	Polyvinyl chloride (PVC)	Furniture, mattress covers, tubing, floors	***
	Vinyl	Floors, furniture	$\star\star\star$
Glass	Glass	X-ray shields, glass partitions	***
Metals	Stainless Steel 316	Sinks, wheelchairs, bed frames, cabinets, carts, trolleys, furniture, fixtures, equipment, counters	***
Hard Porous Surfaces	Glazed Ceramic	Tiles	$\star\star\star$
	Formica®	Countertops	**
Soft Surfaces	Polyester (100%)	Privacy curtains	***
	Polyester/Cotton blend (50/50)	Scrubs	**

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