

# Material Compatibility

An ideal disinfectant provides rapid broad-spectrum kill of microorganisms of concern, without damaging surfaces. Yet no disinfectant is compatible with every surface material it may encounter during use. For this reason, understanding material compatibility is critical. Wipes were tested on the following base materials for a test duration simulating 3000 applications at ambient room temperature. After completion of the exposure time, samples were rinsed with tap water and allowed to dry at room temperature. Materials were scored on a rating of 1 to 6 stars; 6 stars having no perceptible change and 1 star having considerable perceptible or measured change.



## Favorable Test Results

6000378, 6000382, 6000350      6000261, 6000262

MATERIAL TYPE	SURFACE	COMMONLY FOUND IN HOSPITAL EQUIPMENT	RATING: Disinfectant 1 Wipe (EPA Reg No. 1677-263)	NOTED CHANGES
Plastics	Acrylonitrile Butadiene Styrene (ABS)	Keyboards, monitors	★★★★★	No Change
	Polytetrafluoroethylene (PTFE)	Cables, tubing	★★★★★	No Change
	High Density Polyethylene (HDPE)	Carts	★★★★★	No Change
	Polyvinyl Chloride (PVC)	Stethoscopes, tables, cables, coated mattresses, operating tables	★★★★★	No Change
	Polyethylene Terephthalate (PET)	Monitors, telephones, blood pressure cuffs	★★★★★	No Change
	Polysulfone (PSU)	Anesthesia masks	★★★★★	No Change
	Polyphenylsulfone (PPSU)	Sterilization cases and trays, pharmaceutical filter housing	★★★★★	No Change
	Polyetheretherketone (PEEK)	Sterilization cases and trays	★★★★★	No Change
	Polystyrene (PS)	Monitors, telephones	★★★★★	No Change
	Polyamide (PA)	Cables	★★★★★	No Change
	Polyurethane (PU)	Coated mattresses, chairs	★★★★★	No Change
	Polycarbonate (PC)	Operating room lights, monitors	★★★★★	No Change
	Polypropylene (PP)	Instrument trays, surgical drapes, coated pillowcases, toilet seats	★★★★★	No Change
	Acetal Copolymer (POM-C)	Lock systems (wheelchairs, gurneys)	★★★★★	No Change
Engineered Hard Surface	Acetal Homopolymer POM-H	Safety restraints	★★★★★	No Change
	Polyvinylidene fluoride (PVDF)	Medical tubing, filtration devices	★★★★★	No Change
	Corian	Countertops	★★★★★	No Change
	Krion	Countertops	★★★★★	No Change
Elastomers	High Pressure Laminate (HPL)	Cabinets, countertops, tables, operating tables	★★★★★	No Change
	Glass	Mirrors	★★★★★	No Change
	Silicone	Stethoscopes, device buttons, tubing, pumps	★★★★★	No Change
	Ethylene Propylene Diene Monomer (EPDM)	Hosing, valves	★★★★★	No Change
	Neoprene	Orthopedic braces	★★★★★	No Change
	Viton®	Gaskets	★★★★★	No Change
	Rubber	Stethoscopes	★★★★★	No Change
Metals	PVC Endoscope Sheath (Fujifilm)	Endoscope sheath	★★★★★	No Change
	Brushed Stainless Steel	Carts, cabinets, bed railings, countertops, instrument trays, gurneys, IV poles, stethoscopes, faucets, sink basins, operating tables	★★★★★	No Change
	Anodized Aluminum	Carts, walkers, wheelchairs, stethoscopes, operating tables	★★★★★	No Change
	Chrome-plated Brass	Faucets, gurneys, carts	★★★★★	No Change
	Nickel	Support structures and fixtures	★★★★★	No Change
	Bright Stainless Steel	Sink basins, tray tables	★★★★★	No Change
	Lacquered Aluminum	Wheelchairs	★★★★	Slight white discoloration/tarnishing
Fabric/Upholstery	Titanium	Medical equipment charts, wheelchair frames	★★★★	Slight oxidation of the surface/tarnishing
	Vinyl coated fabric	Coated pillowcases, wheelchairs, exam tables, chairs, gurneys, operating tables	★★★★★	No Change
	PVC Coated Polyester	Coated mattresses	★★★★★	No Change
	PVC Coated Cotton	Protective clothing and aprons, mattress covers, privacy curtains	★★★★★	No Change
	PU/Polyester bi-elastic	Medical equipment covers, room dividers	★★★★★	No Change
	Skai Coated Fabric	Exam tables, chairs	★★★★★	No Change

## Less Favorable Test Results

MATERIAL TYPE	SURFACE	COMMONLY FOUND IN HOSPITAL EQUIPMENT	RATING: Disinfectant 1 Wipe (EPA Reg No. 1677-263)	NOTED CHANGES
Plastics	Poly Methyl Methacrylate (PMMA) (Acrylic)	Acrylic bassinets, acrylic isolettes, acrylic mammogram face shields/compression devices, acrylic hyperbaric chambers, acrylic screens	★★	Appearance of micro-cracks on the surface
Elastomers	Nitrile	Hoses	★★★	Surface roughness
Fabric/Upholstery	Polyurethane coated Polyester	Coated mattresses	★★	Color change and wrinkled surface appearance
	Nylon Fabric	Wheelchairs, chairs, coated mattresses	★★	2.23% weight gain

Alternative  
disinfectant wipe  
recommended:  
Quaternary  
Disinfectant Wipe



6000169, 6000166

If you have compatibility concerns on a specific product, or piece of equipment, please check with your Ecolab representative.

Contact Information:

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6000169, 6000166

## Favorable Test Results

MATERIAL TYPE	SURFACE	COMMONLY FOUND IN HOSPITAL EQUIPMENT	RATING: Quaternary Disinfectant Wipe (EPA Reg No. 6836-372-1677)	NOTED CHANGES
Plastics	Acrylonitrile Butadiene Styrene (ABS)	Keyboards, monitors	★★★★★	No Change
	Polytetrafluoroethylene (PTFE)	Cables, tubing	★★★★★	No Change
	High Density Polyethylene (HDPE)	Carts	★★★★★	No Change
	Polyvinyl Chloride (PVC)	Stethoscopes, tables, cables, coated mattresses, operating tables	★★★★★	No Change
	Polyethylene Terephthalate (PET)	LED displays, blood pressure cuffs	★★★★★	No Change
	Polysulfone (PSU)	Anesthesia masks	★★★★★	No Change
	Polyphenylsulfone (PPSU)	Sterilization cases and trays, pharmaceutical filter housing	★★★★★	No Change
	Polyetheretherketone (PEEK)	Sterilization cases and trays	★★★★★	No Change
	Polystyrene (PS)	Monitors, telephones	★★★★★	No Change
	Polyamide (PA)	Cables	★★★★★	No Change
	Poly Methyl Methacrylate (PMMA) (Acrylic)	Isolettes, LED displays, mammogram face shield/compression device, hyperbaric chamber, blood pressure monitors, pulse oximeters, blood glucose monitors	★★★★★	No Change
	Polyurethane (PU)	Tubing, coated mattresses, chairs	★★★★★	No Change
	Polycarbonate (PC)	Operating room light, monitors	★★★★★	No Change
	Polypropylene (PP)	Instrument trays, surgical drapes, coated pillowcases, toilet seats	★★★★★	No Change
Engineered Hard Surface	Acetal Copolymer (POM-C)	Lock systems (wheelchairs, gurneys)	★★★★★	No Change
	Acetal Homopolymer POM-H	Safety restraints	★★★★★	No Change
	Polyvinylidene fluoride (PVDF)	Medical tubing, filtration devices	★★★★★	No Change
	Corian	Countertops	★★★★★	No Change
Elastomers	Krion	Countertops	★★★★★	No Change
	High Pressure Laminate (HPL)	Cabinets, countertops, tables, operating tables	★★★★★	No Change
	Glass	Mirrors	★★★★★	No Change
	Silicone	Stethoscopes, device buttons, tubing, pumps	★★★★★	No Change
	Ethylene Propylene Diene Monomer (EPDM)	Orthopedic braces	★★★★★	No Change
	Viton®	Gaskets	★★★★★	No Change
	Rubber	Stethoscopes	★★★★★	No Change
Metals	Nitrile	Hoses	★★★	Slightly Sticky
	PVC Endoscope Sheath (Fujifilm)	Endoscope sheath	★★★★★	No Change
	Brushed Stainless Steel	Carts, cabinets, bed railings, countertops, instrument trays, gurneys, IV poles, stethoscopes, faucets, sink basins, operating tables	★★★★★	No Change
	Titanium	Wheelchair frames	★★★★★	No Change
	Chrome-plated Brass	Faucets, gurneys, carts	★★★★★	No Change
	Lacquered Aluminum	Wheelchair frames	★★★	Slight white discoloration/tarnishing
	Bright Stainless Steel	Sink basins, tray tables	★★★★★	No Change
Fabric/Upholstery	Nickel	Support structures and fixtures	★★★★★	No Change
	Vinyl coated fabric	Coated pillowcases, wheelchairs, exam tables, chairs, gurneys, operating tables	★★★★★	No Change
	PVC Coated Polyester	Coated mattresses	★★★★★	No Change
	PVC Coated Cotton	Protective clothing and aprons, mattress covers, privacy curtains	★★★★★	No Change
	PU/Polyester bi-elastic	Medical equipment covers, room dividers	★★★★★	No Change
	Nylon Fabric	Wheelchair seats, chairs, coated mattresses	★★★★★	No Change
	Polyurethane coated Polyester	Coated mattresses	★★★★★	No Change
	Skai Coated Fabric	Exam tables, chairs	★★★★★	No Change

## Less Favorable Test Results

MATERIAL TYPE	SURFACE	COMMONLY FOUND IN HOSPITAL EQUIPMENT	RATING: Quaternary Disinfectant Wipe (EPA Reg No. 6836-372-1677)	NOTED CHANGES
Elastomers	Neoprene	Orthopedic braces	★★★	Surface roughness
Metals	Anodized Aluminum	Carts and walkers made of anodized aluminum	★★★	Loss of anodizing intensity

Alternative disinfectant wipe recommended: Disinfectant 1

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