

# 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<br>(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                                  |
|                         | Acetal Homopolymer POM-H                | Safety restraints                                                                                                                     | ★★★★★                                                 | No Change                                  |
| Engineered Hard Surface | Polyvinylidene fluoride (PVDF)          | Medical tubing, filtration devices                                                                                                    | ★★★★★                                                 | No Change                                  |
|                         | Corian                                  | Countertops                                                                                                                           | ★★★★★                                                 | No Change                                  |
|                         | Krion                                   | Countertops                                                                                                                           | ★★★★★                                                 | No Change                                  |
|                         | High Pressure Laminate (HPL)            | Cabinets, countertops, tables, operating tables                                                                                       | ★★★★★                                                 | No Change                                  |
|                         | Glass                                   | Mirrors                                                                                                                               | ★★★★★                                                 | No Change                                  |
| Elastomers              | 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      |
|                         | Titanium                                | Medical equipment charts, wheelchair frames                                                                                           | ★★★★                                                  | Slight oxidation of the surface/tarnishing |
| Fabric/Upholstery       | 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<br>(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:

Call: 1 866 781 8787 | Visit: ecolab.com

# 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.



6000169, 6000166

## Favorable Test Results

| MATERIAL TYPE           | SURFACE                                   | COMMONLY FOUND IN HOSPITAL EQUIPMENT                                                                                                                     | RATING: Quaternary Disinfectant Wipe<br>(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                             |
|                         | 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                             |
| Engineered Hard Surface | Corian                                    | Countertops                                                                                                                                              | ★★★★★                                                               | No Change                             |
|                         | Krion                                     | Countertops                                                                                                                                              | ★★★★★                                                               | No Change                             |
|                         | High Pressure Laminate (HPL)              | Cabinets, countertops, tables, operating tables                                                                                                          | ★★★★★                                                               | No Change                             |
|                         | Glass                                     | Mirrors                                                                                                                                                  | ★★★★★                                                               | No Change                             |
| Elastomers              | 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                             |
|                         | Nitrile                                   | Hoses                                                                                                                                                    | ★★★★                                                                | Slightly Sticky                       |
|                         | PVC Endoscope Sheath (Fujifilm)           | Endoscope sheath                                                                                                                                         | ★★★★★                                                               | No Change                             |
| Metals                  | 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                             |
|                         | Nickel                                    | Support structures and fixtures                                                                                                                          | ★★★★★                                                               | No Change                             |
| Fabric/Upholstery       | 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                             |
|                         | Skaï Coated Fabric                        | Exam tables, chairs                                                                                                                                      | ★★★★★                                                               | No Change                             |

## Less Favorable Test Results

| MATERIAL TYPE | SURFACE           | COMMONLY FOUND IN HOSPITAL EQUIPMENT        | RATING: Quaternary Disinfectant Wipe<br>(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

6000378, 6000382, 6000350, 6000262, 6000261



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

Contact Information:

Call: 1 866 781 8787 | Visit: ecolab.com