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FROM: Healthcare Technical Service

SUBJECT: DISINFECTANT 1 WIPE - 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. *Disinfectant 1 Wipe* has been tested on numerous substrates to assess compatibility of common base materials. The material compatibility profile of *Disinfectant 1 Wipe* is favorable for use on most surfaces found in a hospital environment.

Disinfectant 1 Wipe was tested on the following base materials for a test duration simulating 3000 applications ambient room temperature. After completion of the exposure time, samples were rinsed with tap water and allowed to dry at room temperature, then weighed, examined microscopically, and assigned a rating based on any changes observed.

Plastics	Metals
Acrylonitrile Butadiene Styrene (ABS)	Brushed Stainless Steel
Polytetrafluoroethylene (PTFE)	Bright Stainless Steel
Polyethylene (PE)	Titanium
High Density Polyethylene (HDPE)	Lacquered Aluminum
Polyvinyl Chloride (PVC)	Anodized Aluminum
Polyethylene Terephthalate (PET)	Chrome-plated Brass
Polysulfone (PSU)	Nickel
Polyphenylsulfone (PPSU)	**Elastomers**
Polyetheretherketone (PEEK)	Nitrile
Polystyrene (PS)	Silicone
Polyamide (PA)	Ethylene Propylene Diene Monomer (EPDM)
Poly Methyl Methacrylate (PMMA) (Acrylic)	Neoprene
Polycarbonate (PC)	Viton®
Polypropylene (PP)	Rubber
Acetal Copolymer (POM-C)	**Fabric/Upholstery**
Acetal Homopolymer (POM-H)	Nylon
Polyurethane (PU)	PVC Coated Cotton
Polyvinylidene Fluoride (PVDF)	Vinyl/PU coated fabric
PVC Endoscope Sheath (Fujifilm)*	PVC Coated Polyester
Engineered Hard Surfaces	Polyurethane coated fabric
Corian	PU/ Polyester bi-elastic
Krion	Velour Polyester
High Pressure Laminate (HPL)	Skai Coated Fabric
Glass	

Materials tested determined to be compatible with *Disinfectant 1 Wipe* were:

Plastics	Engineered Hard Surfaces	Elastomers
Acrylonitrile Butadiene Styrene (ABS)	Corian	Nitrile*
Polytetrafluoroethylene (PTFE)	Krion	Silicone
High Density Polyethylene (HDPE)	High Pressure Laminate (HPL)	Ethylene Propylene Diene Monomer (EPDM)
Polyvinyl Chloride (PVC)	Glass	Neoprene
Polyethylene Terephthalate (PET)	**Metals**	Viton®
Polysulfone (PSU)	Brushed Stainless Steel	Rubber
Polyphenylsulfone (PPSU)	Bright Stainless Steel	PVC Endoscope Sheath (Fujifilm)†
Polyetheretherketone (PEEK)	Titanium*	**Fabric/Upholstery**
Polystyrene (PS)	Lacquered Aluminum*	Vinyl/PU coated fabric
Polyamide (PA)	Anodized Aluminum	PVC Coated Polyester
Polyurethane (PU)	Chrome-plated Brass	PVC Coated Cotton
Polycarbonate (PC)	Nickel	PU/ Polyester bi-elastic
Polypropylene (PP)		Nylon Fabric*
Acetal Copolymer (POM-C)		Skai Coated Fabric
Acetal Homopolymer POM-H		
Polyvinylidene fluoride (PVDF)		

(*) - Cosmetic changes, stickiness or a change in surface roughness may be considered unfavorable from an anesthetic or use standpoint and should be taken into consideration when determining whether to adopt use on a potentially sensitive surface.

(†) -*Disinfectant 1 Wipe* is not to be used as a terminal sterilant/high-level disinfectant on any surface or instrument that is (1) introduced directly into the human body, either into or in contact with the bloodstream or normally sterile areas of the body, or (2) contacts intact mucous membranes, but which does not ordinarily penetrate the blood barrier or otherwise enter normally sterile areas of the body. *Disinfectant 1 Wipe* may be used to preclean critical or semi-critical medical devices prior to sterilization or high-level disinfection.

Materials tested determined to be incompatible with *Disinfectant 1 Wipe* were:

Plastics	Fabric/Upholstery
Poly Methyl Methacrylate (PMMA) (Acrylic)	Polyurethane coated Polyester
	Velvet Polyester

Chemical material compatibility performed on base substrates provides a sense of the general material compatibility profile of *Disinfectant 1 Wipe*. Due to the various blends and grades of materials available in the marketplace, some of which are proprietary, if the materials of construction of the equipment or surface are unknown, the manufacturer should be consulted.

The test results outlined herein, are intended to inform end users of potential surface compatibilities and incompatibilities so risk analyses and conversations with Original Equipment Manufacturers (OEMs) can guide infection control policies and procedures.

Ecolab strives to partner with OEMs on disinfectant qualification efforts. Should you need further information or have any questions, please feel free to contact your Ecolab Healthcare Sales Representative at 1-866-781-8787.

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