Resistance to Staining and Reagents

0: No Stain **1:** Slight **2:** Moderate **3:** Severe **BI:** Bleaching **D:** Dulling **S:** Softening **R:** Reagent left a residue

	LINOLEUM		BBT	VCT	LVT	SHEET INLAID			SHEET HOMOGENEOUS	SHEET HETEROGENEOUS	SHEET – LIGHT COMMERCIAL	SPECIALTY SLIP-RETARDANT*		SPECIALTY SLIP-RETARDANT*	SPECIALTY ESD	ACCESSORIES
	With NATURCote™	Without NATURCote™	MIGRATIONS	EXCELON® ARTEFFECTS® Standard EXCELON®	NATURAL CREATIONS®	MEDINTECH® TANDEM®	POSSIBILITIES® Petit Point™	Connection CORLON®	MEDINTECH®, ROYAL™	PERSPECTIVES®, TIMBERLINE®, TRANSLATIONS™	COMMISSION® Plus	SAFEGUARD™	SAFEGUARD™ Spa	SAFETY ZONE™	SDT™	Rubber Tile / Treads
Organic Solvents																
Acetone	0	0, D	0, BI	0, S, D	0	0, D	0	0	0, D	0	0	0	0	0, S, D	0, S, D	0
Chloroform	0	0, D	0, BI	0, S, D	0	0, D	0	0	0, D	0	0, D	0, BI	0	0, S, D	0, S, D	0, D
Ethyl Acetate	0	0, D	0, BI	0, S, D	0	0, D	0	0	0, D	0	0	0	1 R	0, S, D	0, S, D	0
Ethyl (Denatured) Alcohol	0	0, D	0	0, D	0	0, D	0	0	0, D	0	0	0	0	0	0	0
Ethyl Ether	0	0, D	0	0, D	0	0, D	0	0	0, D	0	0	1	0	0	0	0
Ethylene Glycol (Antifreeze)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Formaldehyde – 10%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gasoline	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0, D
Isopropyl Alcohol	0	0, D	0	0, D	0	0, D	0	0	0, D	0	0	0	0	0	0	0
Kerosene	0	0	0, BI	0	0	0	0	0	0	0	0	0	0	0	0	2
Methylene Chloride	0	0, D	0, BI	0, S, D	0	0, D	0	0	0, D	0	0	0, BI	2	0, S, D	0, S, D	0, D
Methyl ethyl ketone (M.E.K.)	0, D	0, D	0, BI	0, S, D	0	0, D	0	0	0, D	0	0	0	0	0, S, D	0, S, D	0, D
Mineral Spirits	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Perchloroethylene	0	0	0, BI	0, D	0	0	0	0	0	0	0	0	0	0, S	0, D	0, D
Toluene	0	1	0, BI	0, S, D	0	0, D	0	0	0, D	0	0	0	0	0, S	0, S, D	0, D
Trichloroethylene	0	1	0, BI	0, S, D	0	0, D	0	0	0, D	0	0	0	0	0, S	0, S, D	0, D
Turpentine	0	1	0	0, D	0	0, D	0	0	0, D	0	0	0	0	0	0	0, D
Xylene	0	1	0, BI	0, S, D	0	0, D	0	0	0, D	0	0	0	0	0, S	0, S, D	0, D
Alkali (Bases)																
Ammonium Hydroxide – 30%	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0,D	0
Potassium Hydroxide – 15%	0, D	3	0	1, D	0	0	3	0, D	0	0, D	0	1	0	1	3	0, D
Sodium Hydroxide – 50%	0, D	1	0	0	0	0	0	0, D	0	0, D	0	0	0	1	3	0
Acids																
Acetic Acid – 28%	0	0	0, D	0, BI	0	0	0	0	0	0	0	0	0	0	0, D	1, D
Acetic Acid – Glacial	0	0, D	0, D	1, D	0	0, D	0	0	0, D	0	0, D	0	0	0	0	1, D
Hydrochloric – 38%	0	0, D	0, D	0, BI	0	0, D	0	0	0, D	0	0, D	0	0	0	0	0, D
Lactic Acid – 10%	0	0, D	1, BI	0, BI, R	0	0, D	0	0	0, D	0	0	0	0	0	0, R	1, D
Nitric Acid – 15%	0	2	0	0, BI	0	0, D	0	0	0, D	0	0	0	0	0	0, D, R	1, D
Phosphoric Acid – 85%	0	1	1, BI	0, BI, R	0	0, D	0, D	0	0, D	0	0, D	0	0, D	0, D	0, BI, R	1, D
Sulfuric Acid – 40%	0	1	1, BI	0, BI, R	0	0	0, BI	0	0	0	0, D	0	0	0, D	0, BI, R	1, D
Sulfuric Acid – 10%	0	0	1, BI	0, BI, R	0	0	0	0	0	0	0	0	0	0, D	0, D	0, D
Salt Solutions																
Calcium Chloride – Sat'd	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Copper Sulfate – 10%	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
Ferric Chloride – 10%	0	1	2	2	0	0	1	0	0	0	0	0	0	2	2	1
Silver Nitrate – 1%	0	1	0	2	0	0	1	0	0	0	0	0	0	2	3	1
Medical Stains & Reagents																
Aniline Blue – 2.5%	0	0	1	1	0	0	0	0	0	0	0	1	0	1	1	1
Auramine Rhodamine	2	2	2	2	1	2	3	2	2	3	0	2	1	2	2	1
Basic Fuchsin	3	3	3	2	1	2	3	3	2	3	1	2	2	2	2	0
Betadine® Skin Cleanser	1	0	1	1	0	1	2	1	1	0	0	2	0	1	2	1
Betadine Solution – 10%	1	0	1	1	0	1	2	1	1	0	0	0	0	1	2	1
Bromcresol Green	2	2	1	1	1	1	2	2	1	0	0	1	1	1	2	0
Carbol Fuchsin	1	1	3	3	1	1	1	1	1	1	0	2	2	3	2	1
Eosin – 1%	2	2	1	1	1	1	2	2	1	2	0	2	1	2	2	1
Gentian Violet – 2%	3	2	3	3	2	2	3	3	2	3	0	3	3	2	3	1
Glutaraldehyde	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
Iodine Tincture	3	3	3	3	3	3	3	3	3	3	2	3	2	3	3	3
Iodine Gram Stain	3	3	2	2	1	3	3	3	3	2	1	2	1	2	2	2
Iodoform – 1%	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
Lugol's Solution	3	3	3	3	3	3	3	3	3	3	2	3	2	3	3	3
Merthiolate Tincture	2	3	2	3	2	2	2	2	2	3	0	1	1	2	3	2
Methylene Blue	2	2	2	2	1	2	2	2	2	2	0	2	2	2	3	2
Picric Acid – 1%	3	3	2	3	1	2	3	2	2	2	0	2	2	2	3	3
Potassium Permanganate – 0.5%	3	2	2	2	3	3	3	3	3	3	1	2	1	2	3	0
Tincture of Benzoin	3, R	3, R	2, R	3, R	3, R	3, R	3, R	3, R	3, R	3, R	3, R	2	2	3, R	3, R	3, R
Urea Solution	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wright's Blood Stain	3	3	2	3	2	3	3	3	3	3	0	3	2	3	3	1
Embalming Chemicals																
Pretresol – Pre-injection	0	0	0, D	0, D	1	0	0	0	0	0	0	0	0	0	0, D	0, D
Kelcavex – Cavity	0	0	0, D	0, D	0	0, D	0	0	0, D	0	1	0	0	0	0, D	0, D
Kelspecial® – Arterial	0	0	0, D	0, D	0	0	0	0	0	0	0	0	0	0	0	0, D
Presinol – Arterial	0	0	0, D	0	0	1	0	0	1	0	0	0	0	1	2	0, D
Disinfectants and Cleaners																
Clorox®	0	1, BI	0	0, D	0	0, BI	0	0	0, BI	0	0	0	0	0	0	0
Comet® Bathroom Cleaner	0	0	0, D	0, D	0	0	0	0	0	0	0	0	0	0	0	0, D
Hydrogen Peroxide	0	0	0	0, D	0	0	0	0	0	0	0	0	0	0	0	0, D
Lysol® Liquid Disinfectant	0	0	0, D	0, D	0	0	0	0	0	0	0	0	0	0	0	0, D
Food Service																
Catsup	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0, D
Coffee – Hot Black	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Cola Drink	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
French Dressing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0, D
Mustard	2	1	2	2	1	2	2	2	2	1	0	2	1	2	2	1
Red Food Color	2	1	2	1	2	2	2	2	2	1	0	3	1	2	2	0
Red Wine	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	0
Soy Sauce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Spaghetti Sauce	0	0	0	1	0	0	0	0	0	0	0	1	0	1	1	1
Tea – Hot Black	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	0, D
Tomato Paste	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0, D
Office																
Ball Pen Ink	3	3	3	3	2	3	2	3	3	2	2	2	2	3	3	2
Carbon Paper Smudge	1	0	2	2	0	2	0	0	2	0	0	2	1	0	1	2
Fountain Pen Ink	0	0, D	2	2	0	0	0	0	0	0	0	1	1	1	2	2
Lead Pencil	1	0	2	1	0	1	1	0	1	0	0	2	1	0	0	2
Permanent Black Marker	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Photo Copy Toner (Powder)	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
Red Crayon	2	2	2	2	2	3	2	2	3	2	1	1	1	2	1	0
Red Tempura Paint	0	0, D	1	1	0	0	0	0	0	1	0	1	0	1	0	0
Oils																
Beef Tallow – Hot	0	0	0	0	0	0	0	0	0	0	0	0, D	0	0	0	0, D
Canola Oil	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0, D
Cottonseed Oil	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0, D
Brake Fluid	0	0, D	0, D	0, D	0	0	0	0	0	0	0	0	0	0	0	0, D
Dextron Transmission Fluid	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1, D
Mineral Oil	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0, D
Olive Oil	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0, D
SAE #10 Oil	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0, D
30 wt. Non-Detergent Oil	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0, D
Used Motor Oil	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1	1, D
Miscellaneous																
Asphalt Driveway Sealer	3, R	3, R	1	1	3, R	3, R	3, R	3, R	3, R	3, R	3, R	1	1	3, R	3, R	0
Blue Chalk	0	0	1	1	1	1	0	0	1	0	0	1	1	1	1	1
Black Rit Dye	3	3	1	3	1	3	3	3	3	2	0	3	3	2	3	1
Eye Shadow	0	0, D	3	0	0	0	0	0	0	0	0	0	0	0	0	0
Hair Color	3	3	1	3	2	3	3	3	3	2	0	3	2	3	3	1
Lipstick	0	2	1	2	0	1	2	1	1	2, R	0	2	1	1	2	1
Perfume	0	1	0, BI	1	0	0, D	0	0	0, D	0	0	1	0	0	1	0
Red Candle Wax	2, R	3, R	1	2, R	2, R	3, R	3, R	2, R	3, R	2, R	2, R	1	1	3, R	3, R	2, R
Red Nail Polish	3, R	3, R	3, R	3, R	3, R	3, R	3, R	3, R	3, R	3, R	3, R	3, R	3, R	3, R	3, R	3, R
Shoe Polish – Liquid Brown	0	0	1	1	1	1	0	0	1	0	0	1	1	1	1	0
Shoe Polish – Paste Brown	2, R	3, R	3	3, R	3, R	3, R	3, R	3, R	3, R	1,R	2, R	3	3	3, R	3, R	2

Samples were tested as manufactured (no additional surface treatments). All samples were exposed to reagents for four hours (uncovered), then cleaned with a neutral commercial cleaner and cotton cloth. A key for interpreting results is found above. It is important to note that in some cases residual stain, residues and surface dulling may be further reduced or eliminated with different or more aggressive cleaning procedures and/or cleaning agents than the common method used for this multi-product comparison. For further details on appropriate cleaning methods and care for specific products, please consult the care and maintenance guidelines for the specific product at armstrong.com/flooring.

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