# Resistance of resilient coverings to coloured products and chemical products

REFERENCES		Marmoleum/ UNL Habitat/ Decibel/ Modul'Up Modular Colomousse/ Batilame			Sarlon Sparkling 15 dB & 17 dB/ Sparkling compact			Sarlon Marche Complete			Eternal/Allura/ Novibat			Allura Click			Surestep/ Safestep			Allura Colour			Colorex SD/E0 Plus				
STAIN PRODUCT	Tir 30'	ne con 2h	tact 24h		ne con 2h	tact 24h		ne cont 2h	act 24h		ne cont 2h	tact 24h	Tin 30'	ne cont 2h	tact 24h		ne con 2h	tact 24h		ne con 2h	tact 24h		ne cont 2h	act 24h		ne cont 2h	tact 24h
FOOD																											
Coffee	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Tea	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Red wine Beer	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Soda Cola	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fruity drink water	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Citrus Soda	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Energy Drink	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Milk Cordial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Concentrated lemon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tomato concentrate	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1
Ketchup	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Edible oil	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Butter Madeira sauce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mashed carrots	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	1	1	2
Mashed greens	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Beetroot	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mix of red fruits	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Candy colored jelly	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Colorful liquorice Colorful beads coated	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Food colors (Blue & Red)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Flavored Iollipops colorful	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Colored chewing gum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chocolate bars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COSMETIC	0	0	0	0	0	0	0	0	0	0	1	1	0	-1	1	0	0	1	0	0	0	1	1	1	1	1	1
Lipstick Foundation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	1
Perfume / aftershave	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mascara	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hair dye	0	1	2	1	2	3	0	1	2	1	2	3	1	1	2	0	1	2	1	2	2	1	2	3	1	2	3
WRITING																									ù.		
Felt dry RBVN *	0	0	1	0	0	1	0	0	0	1	1	1	0	0	1	0	0	0	0	0	1	1	1	1	1	1	1
Permanent marker RBGB *	0	1	2	0	1	2	0	1	1	1 2	2	3	0	1	2	1	1	2	0	1	2	1	1	2	1	2	2
Permanent marker ONYX School felt RBGB *	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Watercolor RBGB *	0	0	0	0	0	1	0	0	0	1	1	1	0	0	1	0	0	1	0	1	2	0	1	2	2	2	2
Crayon RBGB *	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Chalk RBGB *	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	2	2
Ballpen RBGB * Ink cartridge RBGB *	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0
Pink highlighter neon , blue, green, yellow	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
White eraser, blue	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Glue stick, tube, pot	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HOSPITAL																											
Yellow Dermal Betadine 10%	0	0	0	0	0	1	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	1	2	1	2	3
Betadine Scrub Red 4% 90 ° alcohol	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	1
90 ° alcohol Alcohol - iodine tincture of iodine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aqueous Eosin	0	0	1	0	1	1	0	0	0	1	2	2	0	0	1	0	0	1	0	0	1	0	0	1	0	0	0
Alcoholic Eosin	1	2	2	1	2	2	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	2	2	0	0	1
Pure ArgoNet	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pure Argogerm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pure Aniosurf Pure Bacteranios	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Deterganios pure	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pure Surfanios	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-35% hydrogen peroxide	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Methylene Blue	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Blood Urine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
* Red, Blue, Green, Black	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U

<sup>\*</sup> Red, Blue, Green, Black

REFERENCES	C	rmole UNL Decibe Modul	el/	H M Col	lon Tr Prime labita lodul' omou atilar	o it/ Up isse/	S <sub> </sub> 15 d S <sub> </sub>	Sarloi parkli IB & 1 parkli ompa	ng 7 dB/ ng		on Ma omple		Novibat			Allura Click			Surestep/ Safestep			Allura Colour			Colorex SD/EC Plus		
STAIN PRODUCT	Tin 30'	ne con 2h	tact 24h		ne con 2h	tact 24h	Tir 30'	ne con 2h	tact 24h	Tin 30'	ne con 2h	tact 24h	Tin 30'	ne cont 2h	act 24h	Tin 30'	ne cont 2h	act 24h		ne cont 2h		Tin 30'	ne con 2h	tact 24h	Tin 30'	ne conta 2h	
CHEMICAL PRODUCTS																											
Concentrated sulfuric acid	2	2	2	2	2	2	1	2	2	3	3	3	3	3	3	3	3	3	2	2	2	3	3	3	2	2	2
Sulfuric acid diluted to 3%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	3	0	0	0	0	0	0	0	0	0
Concentrated hydrochloric acid	0	1	2	0	0	0	0	0	0	0	0	0	2	2	2	3	3	3	0	0	0	1	1	1	0	0	0
Dilute hydrochloric acid to 3%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
Concentrated nitric acid	2	2	2	1	1	1	2	2	1	1	1	1	1	1	2	3	3	2	1	1	2	1	1	2	0	0	0
Nitric acid diluted to 3%	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Concentrated acetic acid	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0
Diluted in 3% acetic acid	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lactic acid	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Citric acid concentrate	0	0	0	0	2	2	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potassium permanganate	1	2	3	0	1	2	0	1	2	1	2	2	0	1	2	0	0	1	1	2	3	1	2	3	0	1	2
Silver nitrate	0	1	2	0	1	2	0	1	2	0	1	2	0	0	1	0	0	0	0	0	0	0	0	1	1	2	3
Acetone	0	0	0	1	2	2	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trichlorethylene (substitute)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ether	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ethylacetate	0	0	0	1	2	2	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bleach 48°	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bleach diluted to 3%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MISCELLANEOUS																											
Black shine	0	0	0	1	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Oil-based paint	1	2	2	1	2	2	1	1	2	1	2	2	1	1	2	1	2	2	0	1	2	1	1	2	1	1	2
Acrylic paint	0	0	0	0	0	0	0	0	0	2	2	2	1	1	2	1	1	2	0	0	0	1	2	2	0	0	0
Toner Printer	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mineral oil	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Confetti	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coils	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rubber	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

## Method for testing resistance to chemical substances

#### **Applicable standard**

The standard is NF EN 423 of 20 February 2002 replacing NF EN 423 of December 1993. There is also an international standard ISO 26987.

This standard defines the method for testing the resistance of a resilient flooring to chemical substances to which it is likely to be exposed during use.

#### Procedure

- Liquid products: A piece of glass fibre fabric 40 mm in diameter is applied to the surface of the test sample and saturated with 1 to 2ml of the test liquid. It remains in place during the entire duration of the test.
- Paste products: using a spatula, spread approximately 1,000 mm3 with a thickness of 3 mm.
- Paste products: using a spatula, spread approximately 1,000 mm3 with a thickness of 3 mm.
- The contact time must be 2 hours and if a stain appears, the test is repeated over a period of 30 minutes (any duration of less than 30 minutes, is not significant and cannot be taken into account as it is not representative of human intervention on the product applied in reality).
- Cleaning is done by first wiping the stains using a piece of dry cotton wool for liquids and a spatula for solids. Finish cleaning using a cloth soaked in water or detergent or white spirit or turpentine removed with denatured ethanol.

### Statement of results

The table for determination of stain-resistance must specify the range of coverings tested, the specific staining agents and the results in accordance with the following interpretation:

Index	Test result
0	Unaffected
1	Very slightly affected
2	Slightly affected
3	Affected
4	Severely affected