



# Technical Data Sheet

## EN 438 Stain Test Results

### Chemical Resistant SPC by Durcon

Chemical	Rating (immediately after remove) With / Without covering	Rating (24 hours after remove) With / Without covering
<b>Acid</b>		
Acetic Acid 99%	5/5	5/5
Formic acid 85%	5/5	5/5
Hydrochloric acid 37%	4/4	5/5
Nitric acid 65%	2/3	2/3
Phosphoric acid 85%	4/4	5/5
Sulfuric acid 96%	5/5	5/5
<b>Alkalis</b>		
Ammonia 28%	5/5	5/5
Sodium hydroxide 10%	5/5	5/5
Caustic soda 20%	5/5	5/5
Caustic soda 40%	5/5	5/5
Potassium hydroxide 25%	4/5	5/5
<b>Salts</b>		
Iron (III) chloride 10%	5/5	5/5
Potassium permanganate 10%	2/2	2/3
Silver nitrate 1%	5/5	5/5
Sodium chloride 1 0%	5/5	5/5
Sodium hypochlorite 13%	4/4	5/5
<b>Halogens</b>		
Iodine solution (0.1 N) 100%	2/3	3/4
<b>Organic chemicals</b>		
Dimethylformamide > 99%	5/5	5/5
Benzine	5/5	5/5
Hydrogen peroxide 3%	4/5	5/5
<b>Solvent</b>		
Acetone > 99.5%	5/5	5/5
Ethyl alcohol 96%	5/5	5/5
Methyl alcohol min. 99.8%	5/5	5/5
Methyl chloride 99.8% min	5/5	5/5
Tetrahydrofuran ≥ 99%	5/5	5/5
Toluene ≥ 99.5%	5/5	5/5
Ethyl acetate ≥ 99.5%	5/5	5/5
<b>Biological reagents</b>		
Congo red 1%	5/5	5/5
1% malachite green oxalate	5/5	5/5
Methylene blue 1%	4/4	4/4

*Independent testing performed by EPH – April 2011*

#### Testing of resistance to staining:

- Test standard..... EN 438-2
- State of test specimens..... As delivered
- Number of specimens..... 1 sample for each type of covered medium
- Conditioning of specimens..... 16 hours in test atmosphere (23 °C / 50% RH)
- Contact surface..... Decorative sheet surface
- Contact period..... 24 hours in each case
- Test temperature..... 23 °C
- Test Substances..... Chemicals listed in table above

The test chemicals (approx.. 1 ml each) were applied to the sample surface with each enclosed in a sealing bead, and let to affect the surfaces. After application, the areas with the test chemicals were covered by a glass plate.

After a time of exposure of about ten hours the test areas were checked visually and new test substances were applied. After 24 hours, the residues of the substances were removed and the panel surfaces were cleaned without scrubbing. Afterwards, the surfaces were assessed according the rating following rating scale:

- Rating 5: No visible change.
- Rating 4: Slight change of gloss and / or colour, only visible at certain viewing angles.
- Rating 3: Moderate change of gloss and / or colour.
- Rating 2: Marked change of gloss and / or colour.
- Rating 1: Surface distortion and / or blistering.