

SEE WHAT'S IMPORTANT

Issued by:

Groglass

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Cleaning agent tests on GG products

We have tested our Sapphire products for compatibility with various cleaning agents, both in short-term and long-term tests.

In the short-term test, the cleaning agents were applied to the coated glass surface and wiped off after a short exposure time (~a few minutes). All cleaning agents could be removed from the glass surface without leaving any residue, and the **coating was not damaged**.

In the long-term test, the cleaning agents were applied to the glass surface and placed in an oven at an elevated temperature (~60°C) for several hours until most of the substances had dried. Almost all cleaning agents passed the long-term test; however, sodium hypochlorite damaged the coating, and hydrogen peroxide 3% altered the reflected light of the coating.

Summary for long term test:

No.	Substance class	Medium	Result		
			No change	Change in reflective color	Damaged coating
1	Aldehydes	Aldasan 2000, 4%	X		
2	Quaternary compounds	Mikrozid sensitive liquid, neat	X		
3	Guanidine derivatives	Biguanid Fläche N, neat	X		
4	Chlorinated derivatives	Terralin protect, 2%	X		
5	Alkylamines	Incidin PLUS; 8 Vol. %	Not available in market. Was not tested		
6	Phenol and phenol derivatives	Helipur, neat	Not available in market. Was not tested		

No.	Substance class	Medium	Result		
			No change	Change in reflective color	Damaged coating
7	Peroxide compounds	Hydrogen peroxide 3%		X	
8	Pyridine derivatives	Octenisept	X		
9	Alcohol	Ethanol 96%	X		
10	Alcohol	Isopropyl alcohol 70%	X		
11	Petrol	Petroleum benzine boiling range 100-120°C; CAS 64742-49-0	X		
12	Dishwashing detergent - active washing substances	Commercial detergent, 1 Vol%	X		
13	Water	Tap water	X		
14	Water	Distilled water	X		
15	Detergents	Ammonium solution 1.65 Vol. %	X		
	Organic acids	Citric acid 1% (pH 2.2)	X		
17	Lye / alkaline solution	limewash, saturated Ca(OH) ₂ solution	X		
18A	Hypochlorites	Sodium hypochlorite 5-10%			X
18B	Hypochlorites	Sodium hypochlorite 10-20%			X

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