STAINING AND RESISTANCE TO CHEMICALS Linoleum xf²

Tests based on the EN 423 / EN ISO 26987 Norm

Test Objective: Test Principle: Determine the reaction of a resilient floor covering to those chemical substances it is likely subjected to in service. Specified chemical substances in liquid or solid form are placed on a test piece for defined periods and then removed. After cleaning has been carried out, the resulting change of appearance is assessed under specific lighting conditions.

Linoleum

Linoleum xf²

	Substances	Concentration	5'	2h	24h
Acids	Acetic acid CH ₃ COOH	80%	0	0	1
	Citric Acid	50%	0	0	0
	Hydrochloric acid HCl	37%	0	0	2
	Nitric acid HNO ₃	65%	0	1	3
	Nitric acid HNO ₃	30%	0	0	3
	Phosphoric acid H ₃ PO ₄	85%	0	0	0
	Phosphoric acid H ₃ PO ₄	30%	0	0	0
	Sulfuric acid H ₂ SO ₄	98%	0	0	0
	Sulfuric acid H ₂ SO ₄	30%	0	0	0
Alkali	Ammonia NH₄OH	25%	0	1	2
	Sodium hydroxide NaOH	50%	0	1	3
	Potassium hydroxide	0,1%	0	0	0
Salts	Potassium chloride KCl	10%	0	0	0
	Potassium permanganate KMnO₄	5% in H ₂ O	1	3	3
	Silver nitrate AgNO ₃	2% in H₂O	0	0	0
	Sodium carbonate Na ₂ CO ₃	20% in H ₂ O	0	0	0
Solvents	Acetone C₃H ₆ 0	>98%	0	0	0
	Acetonitrile	>98%	0	0	0
	Diethyl ether	> 98%	0	0	0
	Formaldehyde CH₂O	37%	0	0	0
	Heptane	>98%	0	0	0
	White spirit	>98%	0	0	0
Alcohols (contained in Hand	Ethanol C₂H₅OH	>98%	0	0	0
sanitizers)	Isopropanol C₃H ₈ O	>98%	0	0	0
Antiseptics/Disinfectants	Eosin	1% in H ₂ O	0	1	2
	lodine	1% (alcohol)	1	3	3
	PVP-I (Povidone-iodine) - Betadine Yellow bottle	10%	0	0	2
	PVP-AI - Alcoholic Betadine Orange bottle	5%	1	1	2
	PVP-I Scrub - Betadine Red bottle	7,5%	0	1	3
	Chlorhexidine gluconate	0,5%	0	1	3
	Chlx gluconate-Alcohol (Hibitane Plus)	5%	0	0	0
	Hydrogen peroxide	30%	0	2	3
	Peracetic acid $C_2H_4O_3$	15%	0	2	3
	Quaternary Ammonium (used in Floor cleaners)	30%	0	0	0
	hand sanitizer	Alcohol Ethylic denatured 63%	0	0	0
	Sodium hypochlorite (Bleach)	0.5% active chloride in H ₂ O	0	0	0
Others	Urine	n.a.	0	0	0

- 0 Not affected
- 1 Slightly affected
- 2 Moderately affected
- 3 Intensely affected



Stain removal - general advice

Treat marks immediately

Using polyester soft red pad or soft brush ans appropriate detergent to remove residual spots and stains Work from the outside of the mark towards its center. Rinse and wipe afterwards with clean water

