

HIMACS Chemical Resistance Tests Results

Chemical	Chemical Concentration in %	Time of penetration to surface	Test procedure / Test Norm /	Result	Remarks
Acetic acid	20%	24 hours	LG internal test	No Defect	
Acid alcohol	n.i.	24 hours	chem test South America	No Defect (5)	
Amyl alcohol	n.i.	16 hours wet 24 hours dry	acc. DIN EN 12720	S006 = 5-4 S002 = 5	Level 5: no visible change Level 4: slight change in gloss
Ketone alcohol	n.i.	24 hours	chem test South America	No Defect (5)	
Acetone	n.i.	24 hours	LG internal test	No Defect	
Acetone	n.i.		acc. EN ISO 19712-2, part 10 Method A	S028 = 4 G002 = 5-4	Level 5: no visible change Level 4: slight change in gloss
Ammonia water	n.i.	24 hours	LG internal test	No Defect	
Ammonium hydroxide	20%	24 hours	LG internal test	No Defect	
Ammonium hydroxide	10%	16 hours wet 24 hours dry	acc. DIN EN 12720	S006 = 5-4 S002 = 5	Level 5: no visible change Level 4: slight change in gloss
Benzene	n.i.	24 hours	LG internal test	No Defect	
Bleach (NaOCl, household)	n.i.	24 hours	KS M 3007-95	No Defect	
	10%	24 hours	LG internal test	No Defect	
Blood	n.i.	4 hours	chem test South America	No Defect (5)	
Blood	n.i.	16 hours wet 24 hours dry	acc. DIN EN 12720	S006 = 5-4 S002 = 5	Level 5: no visible change Level 4: slight change in gloss
Bromine	n.i.	24 hours	KS M 3007-95	No Defect	

Citric Acid	10%		acc. EN ISO 19712-2, part 10 Method A	S028 = 4 G002 = 5-4	Level 5: no visible change Level 4: slight change in gloss
Colouring agents					
Fuchsine (C₂₀H₂₀CIN₃)	n.i.	24 hours	chem test South America	No Defect (4)	Cleaning water, soap & sponge
Violet (C₁₆H₈Br₂N₂O₂)	n.i.	24 hours	chem test South America	No Defect (5)	cleaning: water & sponge
Safranin (C₂₀H₁₉CIN₄)	n.i.	24 hours	chem test South America	No Defect (5)	
Methylene Blue	n.i.	24 hours	chem test South America	No Defect (5)	
Methylene Blue Phosphate	n.i.	24 hours	chem test South America	No Defect (5)	
Ethyl alcohol	20%	24 hours	LG internal test	No Defect	
Formaldehyde	37%	24 hours	LG internal test	No Defect	
Formic acid	20%	24 hours	LG internal test	No Defect	
Glycerin	n.i.	24 hours	LG internal test	No Defect	
Gasoline	pure	16 hours wet 24 hours dry	acc. DIN EN 12720	S006 = 5 S002 = 5	Level 5: no visible change
Hydrochloric acid	conc	24 hours	KS M 3007-95	No Defect	
Hydrochloric acid	20%	24 hours	KS M 3007-95	No Defect	
	20%	24 hours	LG internal test	No Defect	
Hydrogen peroxide	3%	24 hours	KS M 3007-95	No Defect	
		24 hours	LG internal test	No Defect	
Hydrogen peroxide	30%	24 hours	LG internal test	No Defect	
Hydrogen peroxide	25%		acc. EN ISO 19712-2, part 10 Method A	S028 = 4 G002 = 5-4	Level 5: no visible change Level 4: slight change in gloss
Iodine	3,5%	24 hours	KS M 3007-95	No Defect	
Iodine	10%	24 hours	LG internal test	No Defect	
"Lugol"	2% / 5%	24 hours	chem test South America	No Defect (5)	
Lead acetate	n.i.	24 hours	KS M 3007-95	No Defect	
	20%	24 hours	LG internal test	No Defect	

Methanol	n.i.	24 hours	LG internal test	No Defect	
Methylethyl keton	n.i.	24 hours	LG internal test	No Defect	
Mineral oil	n.i.	16 hours wet 24 hours dry	acc. DIN EN 12720	S006 = 5 S002 = 5	Level 5: no visible change
Nitric Acid	20%	24 hours	KS M 3007-95	No Defect	
	20%	24 hours	LG internal test	No Defect	
Nitric Acid	Conc.	24 hours	KS M 3007-95	light marking	
Perchloric acid	60%	24 hours	KS M 3007-95	No Defect	
Phosphoric acid	17%	24 hours	KS M 3007-95	No Defect	
	20%	24 hours	LG internal test	No Defect	
	85%	24 hours	KS M 3007-95	No Defect	
Potassium Hydroxide	30%	24 hours	KS M 3007-95	No Defect	
Shoe Polish (black)	n.i.		acc. EN ISO 19712-2, part 10 Method A	S028 = 4 G002 = 5-4	Level 5: no visible change Level 4: slight change in gloss
Shoe Polish (silver soft)	n.i.	16 hours wet 24 hours dry	acc. DIN EN 12720	S006 = 5 S002 = 5	Level 5: no visible change
Silver nitrate	1%	24 hours	KS M 3007-95	No Defect	
Silver nitrate	5%	24 hours	KS M 3007-95	No Defect	
Sodium hydroxide	20%	24 hours	LG internal test	No Defect	
Sodium hydroxide	25%		acc. EN ISO 19712-2, part 10 Method A	S028 = 4 G002 = 5-4	Level 5: no visible change Level 4: slight change in gloss
Sodium chloride, saturation	n.i.	24 hours	LG internal test	No Defect	
Soybean oil	n.i.	24 hours	LG internal test	No Defect	
Solution A (?)	n.i.	24 hours	chem test South America	No Defect (5)	
Solution B (?)	n.i.	24 hours	chem test South America	No Defect (5)	
Sulfuric acid	20%	24 hours	KS M 3007-95	No Defect	

	20%	24 hours	LG internal test	No Defect	
Toluene	n.i.	24 hours	LG internal test	No Defect	
Tartaric acid	10%	16 hours wet 24 hours dry	acc. DIN EN 12720	S006 = 5 S002 = 5-4	Level 5: no visible change Level 4: slight change in gloss
Urea	n.i.	16 hours wet 24 hours dry	acc. DIN EN 12720	S006 = 5 S002 = 5-4	Level 5: no visible change Level 4: slight change in gloss
Uric acid	n.i.	16 hours wet 24 hours dry	acc. DIN EN 12720	S006 = 3 S002 = 5	Level 5: no visible change Level 3: minor change in gloss

*This report details is not available for public share.