



Coating

Compatibility with
Various Chemicals

KBS Coating – Compatibility with Various Chemicals

Chemical	Concentration	Short-time * exposure	Long-time * exposure
Acetone	undiluted	5	5
Acetic acid	undiluted	3	5
Acetic acid	10 %	1	1
Acetic acid ethylester	undiluted	3	5
Acrylonitrile	undiluted	3	4
Alcohols, aliphatic, general	undiluted	3	3
Alkalines, general	concentr.	1	5
Alkalines, general	diluted	1	4
Ammonia	25 %	2	4
Ammonia	approx. 3.5 %	2	4
Aromatic solvents, general	undiluted	5	5
Benzene	undiluted	5	5
Boric acid	3 %	2	3
Calciumhydroxide	saturated solution	1	3
Carbon disulfide	undiluted	3	5
Carbon tetrachloride	> see Tetrachloromethan		
Chlorine		2	3
Dichloromethane		5	5
Diesel fuel		1	2
Dimethylformamide		3	4
Diphyl (mixture of diphenyl and diphenyl ether)		2	4
Ethanol	96 %	3	3
Ethanol	20 %	2	3
1,2-Ethanediol	undiluted	1	3
Ethylalcohol	> see Ethanol		
Ethylene glycol	> see 1,2-Ethanediol		
Formaldehyde	30 %	1	3
Formaldehyde	3 %	1	2
Fuel oil (EL) (corresponding to DIN 51603)	undiluted	1	2
Furfural	undiluted	3	4
Gasoline	undiluted	2	2
Glycerin	> see Glycerol		
Glycerol	undiluted	2	2
Glycol	> see 1,2-Ethanediol		
Hydrochloric acid	concentr.	2	4
Hydrochloric acid	10 %	2	3
Hydrochloric acid	1 %	1	2
Hydrofluoric acid	> see Hydrogen fluoride		
Hydrogen fluoride	gas 50 %	2	2
Hydrogen peroxide	30 %	1	5
Hydrogen peroxide	3 %	1	5

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Chemical	Concentration	Short-time * exposure	Long-time * exposure
Isoamyl alcohol	undiluted	1	3
Kerosene	undiluted	1	2
Lubricating oil	undiluted	1	1
Methylalcohol	> see Methanol		
Methanol	undiluted	2	3
Methylenechloride	> see Dichloromethane		
Mineral acids, general (except sulfuric acid)	concentr.	2	4
Mineral acids, general	diluted	2	3
Nitric acid	concentr.	2	5
Nitric acid	10 %	1	3
Nitric acid	1 %	1	3
Oxygen	gas 100 %	1	1
Perchloroethylene	> see Tetrachloroethene		
Petrol	> see Gasoline		
Phosphoric acid	concentr.	2	4
Phosphoric acid	10 %	2	4
Phosphoric acid	1 %	1	2
Phosphoric acid diphenylcresyl ester	undiluted	2	3
Phosphoric acid 2-ethylhexyl ester	undiluted	2	2
Phosphoric acid tributyl ester	undiluted	2	2
Phosphoric acid trioctyl ester	undiluted	2	2
Polychlorinated biphenyl (PCB)	undiluted	2	5
Polyglycol	60 %	1	2
Potassium chloride	10 %	2	2
Potassium lye	approx.50 %	1	5
Potassium lye	10 %	1	4
Potassium lye	1 %	1	4
Sea water	3 %	2	2
Soda	> see Sodium carbonate		
Softeners	> see Phosphoric acid esters		
Sodium carbonate	10 %	1	3
Sodium chloride	10 %	2	2
Sodium hypochlorite	10 %	2	4
Sodium lye	50 %	2	5
Sodium lye	10 %	2	5
Sodium lye	1 %	2	5
Sulfuric acid	concentr.	4	5
Sulfuric acid	10 %	2	2
Sulfuric acid	1 %	1	2
Tetrachloroethene	undiluted	2	5
Tetrachloromethane	undiluted	3	5
Tap water	undiluted	1	2

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Chemical	Concentration	Short-time * exposure	Long-time * exposure
Toluene	undiluted	3	5
Transformer oil	undiluted	2	2
Turbine oil (corresponding to DIN51515)	undiluted	1	1
Urea	10 %	1	1
Water, distilled	undiluted	1	2
Waste oil	undiluted	2	2
Wood alcohol	> see Methanol		
Xylene	undiluted	3	5

*** Short-time exposure:**

The test samples were totally submerged for 30 minutes in the test chemical, then removed, rinsed with a suitable solvent and dried (20°C).

*** Long-time exposure:**

The test samples were totally submerged in the test chemical for a minimum of 28 days, then dried without prior rinsing and closely inspected (20°C).

Explanation of code:

- 1 totally unaffected
- 2 compatible, only negligible or superficial effects
- 3 conditionally compatible, considerable softening or brittleness, distinct change of colour
- 4 not compatible, unacceptable softening or hardening, discoloration, dissolving of surface
- 5 disintegration of coating

All test reports on request.

Disclaimer: The above data, particularly the recommendations for the application and use of KBS products are based on the manufacturer's knowledge and experience. Due to different materials and conditions of application, which are beyond our control, we recommend in any case to carry out sufficient tests in order to ensure that KBS products are suitable for the intended processes and applications. Therefore, any liability for such recommendations or any oral advice is expressly excluded unless we have acted wilfully or by gross negligence. It is always the responsibility of the Installer / purchaser to guarantee correct preparation, DFT (KBS Coatings) and thickness (KBS Penetration Seals) of all KBS Materials. KBS Passive Fire Pty. Ltd. is not liable for installation or faulty installation. It is always the responsibility of the installer / purchaser to guarantee and certify the installation of materials.