



The data given in the following table applies at room temperature (approx. +20 °C) and serves as a guide. Because of the large number of formulations which are used in practice – e.g. in cleaning and disinfection applications – and potential interactions of various chemicals used on site, it is not possible to assume any general or individual guarantee. The chemical resistance of a coating is also influenced by the fillers and pigments used. For these reasons, you will need to perform your own tests on a case-by-case basis.

**Chemicals may in some circumstances lead to discolourations, without attacking the material, however.**

**It must be noted that the aggressiveness of acids and other chemicals can increase at higher temperatures. In addition, it is possible for acids to alter their concentration on the floor by means of evaporation or by absorbing moisture, which could cause them to react more aggressively.**

The stresses which occur in practice often involve greater and more prolonged temperature stresses and may therefore lead to different results in some circumstances. If you have any questions in this regard, please contact Silikal's Application Technology department.

Test medium	SILIKAL® R 62, R 82 RF 6200 pigmented/Base RF 8200 pigmented/Base	SILIKAL® R 71, R 72, R 73, RF 7000 pigmented/Base	SILIKAL® RE 77
<b>Alkalis:</b>			
Ammonium hydroxide 10 %	+	+	+
Ammonium hydroxide 25 %	+	+	+
Ammonium hydroxide, alcoholic	○	○	○
Potassium hydroxide 10 %	+	+	+
Potassium hydroxide 50 %	+	+	+
Calcium hydroxide	+	+	+
Sodium hydroxide 10 %	+	+	+
Sodium hydroxide 50 %	+	+	+
<b>Acids:</b>			
Formic acid 10 %	○	○	-
Formic acid 30 %	-	○	-
Formic acid 42.5 %	-	-	-
Boric acid 3 %	+	+	+
Chromic acid 20 %	+	+	-
Chromic acid 40 %	○	+	-
Acetic acid 10 %	+	+	-
Acetic acid 25 %	○	○	-
Acetic acid 30 %	○	○	-
Acetic acid 80 %	-	-	-
Fatty acid (tall oil fatty acid)	○	○	-
Lactic acid 30 %	+	+	○
Oxalic acid 10 %	+	+	○
Phosphoric acid 40 %	+	+	+
Phosphoric acid conc. (85 %)	○	○	○
Nitric acid 10 %	○	○	○
Nitric acid 30 %	○	-	○
Nitric acid, conc. (65 %)	-	-	-
Hydrochloric acid 10 %	+	+	+
Hydrochloric acid, conc. (36 %)	+	+	+
Sulphuric acid 30 %	+	+	+
Sulphuric acid 50 %	+	+	○
Sulphuric acid 80 %	-	-	○
Citric acid 30 %	+	+	+
Citric acid 50 %	+	+	○

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<b>Solvents:</b>			
Petrol, 2 star	-	+	+
Petrol, 4 star	-	-	+
Benzene	-	-	+
Biodiesel	-	-	-
Butanol	-	-	+
Butyl ether	-	-	○
Chloroform	-	-	-
Cyclohexane	+	+	+
Dibutyl phthalate	○	○	+
Dicyclophthalate	○	○	+
Diesel oil/heating oil	+	+	+
Ethyl acetate	-	-	○
Ethyl alcohol 10 %	○	+	+
Ethyl alcohol 96 %	-	-	○
Glycerine	+	+	+
Heptane	+	+	+
Hexane	+	+	+
Isopropyl alcohol	-	○	+
Kerosine	+	+	+
White spirit	○	+	+
Methanol	-	-	○
Methylene chloride	-	-	-
Monochlorobenzene	○	○	+
n-Propyl acetate	-	-	○
Perchloroethylene	○	○	-
Petroleum	○	+	+
Phenol	○	○	○
Styrene	○	○	○
Turpentine	+	+	+
Toluene	-	-	○
Trichlorethylene	-	-	-
Xylene	-	-	○



Test medium	SILIKAL® R 62, R 82 RF 6200 <small>pigmented/Base</small> RF 8200 <small>pigmented/Base</small>	SILIKAL® R 71, R 72, R 73, RF 7000 <small>pigmented/Base</small>	SILIKAL® RE 77
<b>Water and aqueous solutions:</b>			
Waste water (sewage)	+	+	+
Chlorine water	+	+	+
Formaldehyde 37 %	+	+	○
Anti-freeze (glycol-based)	○	+	+
Tap water	+	+	+
Sea water	+	+	+
Sodium chloride 5 %	+	+	+
Sodium chloride saturated	+	+	+
Sodium hypochlorite 15 %	+	+	+
Sodium carbonate (soda)	+	+	+
Soap solution	+	+	+
Water, deionised	+	+	+
Water +80 °C	○	○	○
Hydrogen peroxide 30 %	○	○	○
Hydrogen peroxide 80 %	○	○	-
<b>Beverages:</b>			
Beer	+	+	+
Brandy 40 vol. %	○	+	+
Vegetable juice	+	+	+
Lemonade	+	+	+
Milk	+	+	+
Tomato juice / grape juice	+	+	+
Red wine	+	+	+

Test medium	SILIKAL® R 62, R 82 RF 6200 <small>pigmented/Base</small> RF 8200 <small>pigmented/Base</small>	SILIKAL® R 71, R 72, R 73, RF 7000 <small>pigmented/Base</small>	SILIKAL® RE 77
<b>Oils and greases:</b>			
Blood	+	+	+
Drilling oils	○	○	+
Hydraulic oil (e.g. Skydrol B 500)	○	○	○
Linseed oil	+	+	+
Mineral oil	+	+	+
Olive oil	+	+	+
Vegetable fats	+	+	+
Castor oil	+	+	+
Crude oil	+	+	+
Animal fats	+	+	+

Assessment		
+	Resistant	Based on the preliminary test, prolonged exposure of the coating material to this medium appears possible. Chemicals may lead to discolourations or to changes in the amount of gloss, but without attacking the material.
○	Partly resistant	Prolonged exposure is not possible, as severe softening or swelling could occur in the case of longer exposure times. Short-term exposure (approx. 1 – 2 hours) is possible.
-	Not resistant	Even brief exposure could cause damage to occur.