

We present the RINOLCRETE Chemical Resistance Assessment, a technical document designed to provide a detailed evaluation of the chemical resistance of our high-performance resin systems. RCR Flooring Products Italia S.r.l. is a recognized leader in the manufacture of resin industrial flooring solutions, and RINOLCRETE is our flagship product, designed to adapt to a wide range of industrial needs.

In the following sections, an exhaustive table is presented illustrating the resistance of RINOLCRETE against a variety of industrial chemicals.

This classification is the result of rigorous testing and is based on our vast experience in the flooring coatings industry.

Chemical resistance table

Chemical	Conc.%	Temp °C	Resistance	Chemical	Conc.%	Temp °C	Resistance
Acetaldehyde	100	20	R	Chromic acid	20	20	R
Acetic acid	10	85	R	Chromic acid	30	20	R
Acetic acid	25	20	R	Citric acid	60	20	R
Acetic acid	25	85	TR	Copper (II) sulphate	Saturated	20	R
Acetic acid	40	20	R	Cresols	100	20	TR
Acetic acid	99 (Glacial)	20	TR	Crude oil	---	20	R
Acetona	100	20	TR	Cyclohexane	100	20	R
Adipic acid	Saturated	20	R	Decanoic (Capric) acid	100	20	R
Ammonium hydroxide	28	20	R	Decanoic (Capric) acid	100	60	R
Aniline	100	20	R	Diethylene glycol	100	20	R
Antifreeze (Ethylene glycol)	100	20	R	Dimethyl formamide	100	20	NR
Aqua regia	---	20	T	Ethanol	100	20	R
Beer	---	20	R	Ethyl acetate	100	20	TR
Benzene	100	20	T	Ethylene glycol	100	20	R
Benzoic acid	100	20	R	Fats	---	80	R
Benzoyl chloride	100	20	R	Formic acid	40	20	R
Blood	---	20	R	Formic acid	70	20	R
Brake fluid	---	20	R	Formic acid	90	20	TR
Brine (sodium chloride)	Saturated	20	R	Formic acid	100	20	TR
Butanol	100	20	R	Gasoline	---	20	R
Calcium chloride	50	20	R	Heptanoic acid	100	60	R
Calcium hypochlorite	Saturated	20	R	Hexane	100	20	R
Caprolactam	100	20	R	Hydrochloric acid	10	60	R
Carbon disulphide	100	20	TR	Hydrochloric acid	37	20	R
Carbon tetrachloride	100	20	R	Hydrofluoric acid	4	20	R
Chlorine water	Saturated	20	R	Hydrofluoric acid	20	20	TR
Chloroacetic acid	10	20	R	Hydrogen peroxide	30	20	R
Chloroacetic acid	50	20	TR	Isopropanol	100	20	R
Chloroform	100	20	TR	Jet fuel	---	20	R

R = Resistant, TR = Temporarily resistant, NR = Non-resistant

Chemical resistance table

Chemical	Concentration %	Temp °C	Resistance	Chemical	Concentration %	Temp °C	Resistance
Kerosene	---	20	R	Phenyl sulphuric acid	10	20	R
Lactic acid	5	20	R	Phosphoric acid	40	85	R
Lactic acid	25	60	R	Phosphoric acid	50	20	R
Lactic acid	85	20	R	Phosphoric acid	85	20	R
Lactic acid	85	60	R	Picric acid	50	20	R
Lauric acid	100	60	R	Propylene glycol	100	20	R
Maleic acid	30	20	R	Potassium hydroxide	50	20	R
Maleic anhydride	100	20	R	Skydrol® 500B4	---	20	R
Methacrylic acid	100	20	R	Skydrol® LD4	---	20	R
Methanol	100	20	R	Sodium hydroxide	20	20	R
Methylated spirits	---	20	R	Sodium hydroxide	20	90	R
Methylene chloride	100	20	TR	Sodium hydroxide	32	20	R
Methyl ethyl ketone	100	20	TR	Sodium hydroxide	50	20	R
Methyl methacrylate	100	20	R	Sodium hydroxide	50	60	R
Milk	---	20	R	Sodium hydroxide	50	90	TR
Mineral oils	---	20	R	Sodium hypochlorite	15	20	R
Motor oil	---	20	R	Styrene	100	20	R
N, N-dimethyl acetamide	100	20	NR	Sulphuric acid	50	20	R
N-methyl pyrrolidone	100	20	NR	Sulphuric acid	98	20	R
Nitric acid	5	20	R	Tetrahydrofuran	100	20	TR
Nitric acid	30	20	R	Toluene	100	20	R
Nitric acid	65	20	TR	Toluene sulphonic acid	100	20	R
Oleic acid	100	20	R	Trichloroacetic acid	100	20	TR
Oleic acid	100	80	R	Turpentine	---	20	R
Oleum	---	20	TR	Vegetable oils	---	80	R
Paraffin	---	20	R	Water (distilled)	---	85	R
Perchloroethylene	100	20	R	White spirit	---	20	R
Phenol	5	20	TR	Xylene	100	20	R

R = Resistant, TR = Temporarily resistant, NR = Non-resistant

This guide is provided for informational purposes and is based on current testing and experiences in the laboratory of RCR Flooring Products Italia S.r.l.. The resistance to chemicals was tested in a standard climate (20°C air and material) according to DIN 50014-23/50-2. The coating was exposed to the test liquid in accordance with DIN 53168. The assessment is based on the criteria of appearance, hardness and blistering or destruction of the surface. Daily maintenance cleaning is assumed. The chemicals must be removed immediately after application and rinsed with water. Surface discolouration may occur without restricting the functionality of the floor.

RCR Flooring Products Italia S.r.l. assumes no responsibility for the use or interpretation of the information contained in this document. Users must conduct their own evaluations to determine the suitability of RINOLCRETE for their specific applications.

We trust that this chemical resistance assessment will provide valuable insight into the capabilities of RINOLCRETE in challenging industrial environments. At RCR Flooring Products Italia S.r.l., we are dedicated to continuous innovation and maintaining the highest standards of quality in all our industrial flooring solutions.