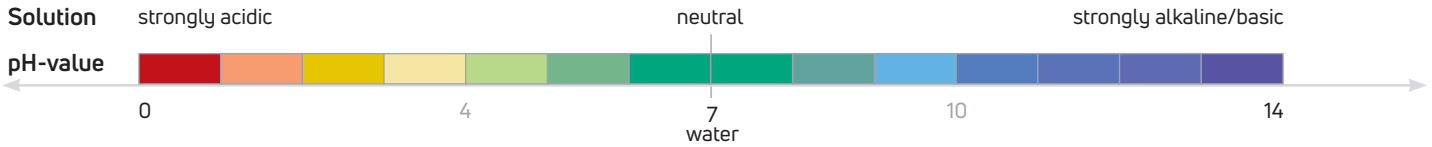








# Chemical Resistance



Suitable (pH 0-7)	Material	Not Suitable (pH 7-14)
<ul style="list-style-type: none"> <li>aliphatic hydrocarbons (e. g. heptane, hexane, industrial spirit/special fuel, white spirit)</li> <li>aromatic hydrocarbons (benzene, naphthalene)</li> <li>pure mineral oils (petrol, diesel, kerosene, fuel oil)</li> <li>lubricating oils (plant-based, mineral, synthetic)</li> </ul>	<b>PA FKM</b> 	<ul style="list-style-type: none"> <li>highly acidic media</li> <li>high alkaline media</li> <li>polar solvents (including mixtures with ethanol alcohol, acetone)</li> <li>water-based cleaner</li> </ul>
<ul style="list-style-type: none"> <li>high-percentage solvent mixtures made of acetates, ketones (such as 20–50% acetone), xylene, toluene, different alcohols and other partly aggressive chemical substances</li> <li>the most widely used acetates, butyl acetate and ethyl acetate in higher concentrations than were previously possible</li> <li>higher concentrations of glycol ether and cyclohexane</li> <li>special mixtures containing naphtha (crude oil-based), mineral oil and petroleum-based solvents</li> </ul>	<b>MASTER SOLVE+</b> 	---
<ul style="list-style-type: none"> <li>acidic media</li> <li>alcohols (isopropyl, ethanol)</li> <li>highly diluted solvents</li> <li>highly diluted alkaline liquids (until approx. pH 9,5)</li> </ul>	<b>PP FKM</b> 	<ul style="list-style-type: none"> <li>high alkaline liquids (from approx. pH 9,5)</li> <li>polar and hydrocarbon solvents</li> <li>special acidic media containing certain proportions of hydrochloric acid, hydrofluoric acid</li> </ul>
<ul style="list-style-type: none"> <li>many inorganic special acids such as mixtures with a composition of up to 30% hydrochloric acid</li> <li>mixtures containing up to 5% hydrofluoric acid (fluorhydric acid) (threshold value chosen for safety reasons)</li> <li>mixtures containing certain proportions of hydrochloric acid, hydrofluoric acid</li> </ul>	<b>MASTER ACID+</b> 	---
<ul style="list-style-type: none"> <li>high alkaline liquids (sodium hydroxide, potassium hydroxide)</li> <li>lyes and bases</li> <li>polyglycol-based liquids (brake fluid)</li> <li>alkaline rim cleaner</li> <li>organic acids in normal concentrations (acetic acid, formic acid)</li> <li>convector cleaner and grill cleaner</li> </ul>	<b>PP EPDM</b> 	<ul style="list-style-type: none"> <li>petroleum products</li> <li>aliphatic hydrocarbons (petrol, butane, propane)</li> <li>aromatic hydrocarbons (benzene, naphthalene)</li> <li>inorganic acids</li> </ul>
<ul style="list-style-type: none"> <li>silicone oils</li> <li>typical plant protection product in normal concentrations</li> <li>pH-neutral aqueous solutions, mixtures, cleaners</li> </ul>	<b>PP NBR</b> 	<ul style="list-style-type: none"> <li>acids and alkalis</li> <li>ester and ketones</li> <li>petroleum products</li> <li>aliphatic hydrocarbons (e. g. heptane, hexane, industrial spirit/special fuel, white spirit)</li> <li>aromatic hydrocarbons (benzene, naphthalene)</li> </ul>

More detailed information and further resistance variants for your product or for higher concentrations can be found in our detailed resistance list.

Spare parts & repair kits available for all products

Upgrade & Tuning for better resistance and longer product lifespan: ValveGuard elbow piece, pump valve membranes, KXP seals, expert seals and acid+ springs. Our product experts in Key Account Management and the Chemical Application Center will be happy to give you a personal consultation tailored to your requirements.

## Please note the following information regarding resistance and product lifespan

The information about the chemical resistance of the plastics we use, and of the seals for our compressed air sprayers, is based on the experiences of the respective raw material producers. However, to a significant extent resistance also depends on the mixing ratio or the concentration of the liquid being sprayed, and variable factors such as the temperature of the medium, the ambient temperature and the operating pressure.

This is why the chemical resistance data should be regarded only as a guideline to finding the right device from our range for the best solidity and product lifespan.

When it comes to the world's most aggressive and extreme chemicals, it is considered a very good result if the pressure sprayer lasts for 3 to 6 months. Kläger Plastik also offers an extensive range of spare part sets and repair kits to extend the product lifespan of its sprayers.

Please note: due to the very different compositions and interactions of the individual substances, we can only make recommendations, not give guarantees, even though many of our products have seen many years of service and are still performing at the highest level.

The Kläger Plastik DEVELOPMENT DEPARTMENT, along with our product experts at the newly founded CHEMICAL APPLICATION CENTER, will help you to choose the most suitable compressed air sprayer for your purpose. This is done by means of resistance tests (live dipping tests and spraying tests).

Due to interactions of the individual substances, it is often not possible to guarantee an exact resistance without in-house testing spread over 6-12 months. Any statements made in this regard are only valid when the product is properly used as specified in the instructions manual.

When a substance is being used for a longer period, or there is a longer period of contact with the substance, greater care should be taken during use.

All of the above information is invalid for substances the user has mixed themselves!

\*This table is designed as an aid to selecting the right pressure sprayer model, and is continually updated thanks to the help and feedback provided by our customers and end consumers\* February 2023