When to use BROEN-LAB pH Neutral Eye Wash

pH Neutral is a buffer with high buffer capacity. It is designed to be used as immediate first aid irrigation solution for eye accidents caused by an acid or alkali.

pH is a mathematical term that describes the concentration of hydrogen ions (H+) or hydroxide ions (OH-) in a solution. If a solution contains hydrogen ions it is acidic (pH < 7), whereas the solution is alkaline, if it contains hydroxide ions (pH > 7). In a neutral solution the pH value is 7. Solutions with pH values below 4 and above 10 impose a risk of corneal burns if eye splashes occur. If measurable, the pH for a chemical is given in section 9 of the safety datasheet.

BROEN-LAB recommends that pH Neutral is available when working with chemicals with pH values either below 4 or above 10. If the pH value is between 4 and 10 or not given in the safety data-sheet for the given chemical, BROEN-LAB recommends the use of BROEN-LAB Eye Wash (0.9 % NaCl, saline) in case of eye splashes. This is illustrated in the figure below.

Independent of the pH value of the chemical there is no risk combined with using pH Neutral instead of BROEN-LAB Eye Wash. Both pH Neutral and BROEN-LAB Eye Wash work by physically removing the chemical from the eye, but in addition to this pH Neutral will neutralize any acidic or alkaline solutions.

