


## Product properties – Technical sheet

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| <b>MICROL<br/>A LIQUID</b>    | <b>Item no.:</b><br><br><b>41 28 06</b>  |
| <b>Areas of application</b>   | <p><b>Microl A Liquid</b> is a strong alkaline product free from detergents and free from silicates.</p> <p><b>Microl A Liquid</b> is a liquid cleaner for membrane in micro filter- and ultra-filter systems.</p> <p><b>Microl A Liquid</b> prevents the cleaning solution from precipitation of water hardness.</p> <p><b>Microl A Liquid</b> is able to remove organic residues as well as fat and oil residues in a very short time.</p> <p>In order to increase the cleaning capacity of the product it is advisable to use an additional booster. <b>Booster H</b> is based on oxygen and guarantees an environment friendly cleaning.</p>   |
| <b>Method of application</b>  | <p><b>Re-circulating cleaning system:</b></p> <ul style="list-style-type: none"> <li>◆ Rinse with water</li> <li>◆ 1.5 - 2.0 % of Microl A Liquid</li> <li>◆ 15 -20 minutes</li> <li>◆ Temperature of 60°C</li> <li>◆ Re-circulating</li> <li>◆ Add 0.3 – 0.5 % of <b>Booster H</b> into that solution</li> <li>◆ Pump again for 15 - 20 minutes</li> <li>◆ It is necessary to rinse thoroughly with a plenty of water and to passivate with <b>Microl SR 020</b></li> </ul> <p>Concentration: 1.5 – 2.0 %<br/>       Temperature: cold – 80°C<br/>       Time: 15 – 30 minutes</p> <p>After having used the product rinse thoroughly with drinking water to remove any possible residues!</p> |
| <b>Material compatibility</b> | <p>PVDF, PP, PE, PVC, Stainless Steel, Glass, Cast Iron, Tiles and membranes suitable for alkaline cleaning solutions.</p> <p><b>Microl A Liquid</b> must not be used on aluminium and membranes made from cellulose and cellulose acetate.</p> <p>In addition, further material incompatibilities cannot be excluded. Therefore, test the product before use and ask the producer of the membrane if the product is compatible with the product.</p>  |

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| <b>Analysis of concentration</b>                                  | according to the titration instructions  |                                    |                                    |
| <b>Physical and chemical properties</b>                           |  |                                    |                                    |
| <b>Aspect/colour</b>  | Clear  | Slightly Brownish – Brownish       |                                    |
| <b>Form</b>   | Liquid   |                                    |                                    |
| <b>Odour</b>  | Odourless  |                                    |                                    |
| <b>Foaming behaviour</b><br>(see under conditions of application) | Not Foaming  |                                    |                                    |
| <b>Phosphates</b>   | n/a  |                                    |                                    |
| <b>Density (20°C) g/cm<sup>3</sup></b>                            | 1,360 – 1,390  |                                    |                                    |
| <b>Concentration</b>  | <b>1 % in H<sub>2</sub>O dest.</b>   | <b>3 % in H<sub>2</sub>O dest.</b> | <b>5 % in H<sub>2</sub>O dest.</b> |
| <b>pH value (1 %, 20°C)</b>                                       | 12.4 – 13.0  | n/a                                | n/a                                |
| <b>Conductance (1 %, 20°C) mS/cm</b>                              | 17.0 – 20.0  | 49.0 – 55.0                        | 78.0 – 88.0                        |
| <b>Phenolphthalein alkalinity (ml)</b>                            | 4.25 ± 0.25 (1 % at 5 ml sample)   |                                    |                                    |
| <b>m-Value (ml)</b>   | n/a  |                                    |                                    |
| <b>Storage stability</b>  | + 5°C to + 40°C  |                                    |                                    |
| <b>Remarks regarding biocides</b>                                 | n/a  |                                    |                                    |
| <b>Hazardous products</b>   | Sodium Hydroxide   |                                    |                                    |
| <b>Risk symbols</b>   |   |                                    |                                    |
|   | <b>DANGER</b>  |                                    |                                    |
| <b>Special remarks</b>  | <p>Always close the container with the original closure, and store the items in a cool area without solar radiation.<br/>Product which was taken out of the container must never be poured back into the container.</p> <p><b>Read in any case our safety data sheet before using the product!</b></p> |                                    |                                    |
| <b>Disposal</b>   | Disposal acc. to official regulations, in case of doubt contact the manufacturer.  |                                    |                                    |

Please refer to our safety data sheets and our operating instructions with regard to precautionary measures, first aid measures and storage. The information given in the Sheet corresponds to the present state of our technical knowledge and experience. They do not constitute any guarantee; they are to be considered as basic information only. In particular they do not guarantee particular properties or the suitability for a concrete purpose. Because of the multitude of possible influences during the application of our products, the user has to make in any case the relevant tests and take the corresponding precautions. Any existing intellectual property rights are to be observed.