## Product properties – Technical sheet



| ANTISCALANT            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Item no.:                                                                                                              |  |
|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|--|
| Т 100                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 00 16 59                                                                                                               |  |
| Areas of application   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                        |  |
|                        | Antiscalant T 100 is a special absorber for water hardness especially developed to prevent the RO membranes from scaling.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                        |  |
|                        | Antiscalant T 100 corresponds concerning composition all approved preparation chemicals according § 11 German drinking water regulation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                        |  |
|                        | Antiscalant T 100 can be used in different applications:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                        |  |
|                        | <ul> <li>Prevention from RO-Membrane Scaling, caused by following substances:         <ul> <li>Calcium carbonate (CaCO<sub>3</sub>) – LSI (Langlier Saturation Index) &lt; 2.5</li> <li>Barium sulphate (BaSO<sub>4</sub>) – till 105 times super-saturation</li> <li>Calcium sulphate (CaSO<sub>4</sub>) – till 3,5 times - super-saturation</li> <li>Strontium sulphate (SrSO<sub>4</sub>) – till 20 times super-saturation</li> <li>Calcium fluoride (Ca F) – till 1000 times super-saturation</li> <li>Calcium fluoride (Ca F) – till 1000 times super-saturation</li> </ul> </li> <li>The ability of disperse is reducing fouling of colloid and fouling of suspended matters on the membrane surfaces</li> <li>Compatibility with poly electrolytes</li> <li>Absorption of heavy metals, results in reduction of fouling of heavy metal</li> <li>Compatibility with all commercial standard RO-membranes</li> </ul> |                                                                                                                        |  |
| Method of application  | Antiscalant T 100 has an optimal e dosed after the multimedia filters an ters. Take care that the product is m lating water.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | ffect, when the product is<br>d before the multiple tube fil-<br>ixed thoroughly in the circu-                         |  |
| Dilution               | Antiscalant T 100 must not be used necessary to use for the mixing soft                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | d more than 1:10 (10 %). It is water or desalinated water.                                                             |  |
| Dosage                 | Antiscalant T 100 use between 2 –<br>dosing ratio should be determined b<br>program for dosing. The WIGOL <sup>®</sup> se<br>port for dosing.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 8 ppm (2 -8 g/m <sup>3</sup> ). The best<br>y <b>WIGOL</b> <sup>®</sup> scale computer<br>ervice gives individual sup- |  |
| Material compatibility | Antiscalant T 100 is compatible wit RO-membranes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | h all commercial standard                                                                                              |  |

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| Analysis of<br>concentration                                                                                                    | Please request our calculation program for this                                                                                                                                                                                                                                                            |                               |                               |  |
|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|-------------------------------|--|
| Physical and chemical properties                                                                                                |                                                                                                                                                                                                                                                                                                            |                               |                               |  |
| Aspect/colour                                                                                                                   | Clear Brown                                                                                                                                                                                                                                                                                                |                               |                               |  |
| Form                                                                                                                            | Liquid                                                                                                                                                                                                                                                                                                     |                               |                               |  |
| Odour                                                                                                                           | Characteristic                                                                                                                                                                                                                                                                                             |                               |                               |  |
| Foaming behaviour<br>(see under conditions of application)                                                                      | Not foaming                                                                                                                                                                                                                                                                                                |                               |                               |  |
| Phosphates                                                                                                                      | n/a                                                                                                                                                                                                                                                                                                        |                               |                               |  |
| Density (20°C) g/cm <sup>3</sup>                                                                                                | .155 – 1.175                                                                                                                                                                                                                                                                                               |                               |                               |  |
| Concentration                                                                                                                   | 1 % in H <sub>2</sub> O dest.                                                                                                                                                                                                                                                                              | 3 % in H <sub>2</sub> O dest. | 5 % in H <sub>2</sub> O dest. |  |
| pH value (1 %, 20°C)                                                                                                            | 2.1 – 2.7                                                                                                                                                                                                                                                                                                  | n/a                           | n/a                           |  |
| Conductance (1 %, 20°C) mS/cm                                                                                                   | 2.3 – 2.8                                                                                                                                                                                                                                                                                                  | 5.5 – 6.5                     | 8.3 – 10.3                    |  |
| Phenolphthalein alkalinity (ml)                                                                                                 | 8.2 ± 0.5 (1 % at 30 ml sample)                                                                                                                                                                                                                                                                            |                               |                               |  |
| m-Value (ml)                                                                                                                    | n/a                                                                                                                                                                                                                                                                                                        |                               |                               |  |
| Storage stability                                                                                                               | + 5°C to + 30°C                                                                                                                                                                                                                                                                                            |                               |                               |  |
| Remarks regarding biocides                                                                                                      | n/a                                                                                                                                                                                                                                                                                                        |                               |                               |  |
| Hazardous products                                                                                                              | Diethylenetriamine penta(methylenephosphonicacid), Sodium salt / 2-phosphonobutane-1,2,4-tricarboxylic acid                                                                                                                                                                                                |                               |                               |  |
| Risk symbols                                                                                                                    |                                                                                                                                                                                                                                                                                                            |                               |                               |  |
|                                                                                                                                 | WARNING                                                                                                                                                                                                                                                                                                    |                               |                               |  |
| Special remarks                                                                                                                 | Always close the container with the original closure, and store<br>the items in a cool area without solar radiation.<br>Product which was taken out of the container must never be<br>poured back into the container.<br><b>Read in any case our safety data sheet before using the</b><br><b>product!</b> |                               |                               |  |
| Disposal                                                                                                                        | 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 |                                                                                                                                                                                                                                                                                                            |                               |                               |  |

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.