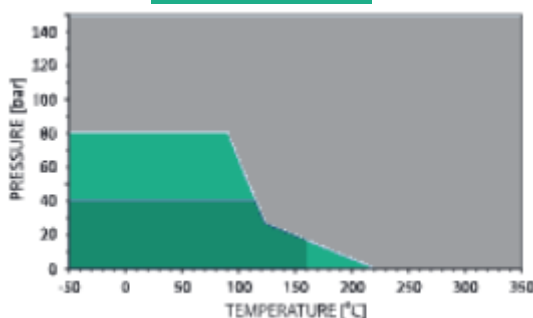


## TESNIT® BA-50

| Material Information         |                                                                                                          |
|------------------------------|----------------------------------------------------------------------------------------------------------|
| <b>Manufacturer</b>          | Donit                                                                                                    |
| <b>Composition</b>           | Aramid fibers, inorganic fillers, NBR binder                                                             |
| <b>Applications</b>          | General purpose, water supply, ship building                                                             |
| <b>Approvals</b>             | DIN-DVGW DIN 3535-6, DNV GL, DVGW W270, EC 1935/2004, SVGW DIN 3535-6, TA-Luft (VDI 2440), TZW ELL, WRAS |
| <b>Colour</b>                | Light green                                                                                              |
| <b>Thickness (mm)</b>        | 0,5; 1,0; 1,5; 2,0; 3,0                                                                                  |
| <b>Sheet dimensions (mm)</b> | 1 500 x 1 500; 3 000 x 1 500; 4 500 x 1 500                                                              |

| Technical Data (2 mm thickness)                        |                                                       |                                                      |
|--------------------------------------------------------|-------------------------------------------------------|------------------------------------------------------|
| <b>Density,</b><br>DIN 28090-2<br>(g/cm <sup>3</sup> ) | <b>Compressibility,</b><br>ASTM F36J<br>(%)           | <b>Recovery,</b><br>ASTM F36A<br>(%)                 |
| 1,8                                                    | 9                                                     | 55                                                   |
| <b>Tensile strength,</b><br>ASTM F152<br>(MPa)         | <b>Stress resistance,</b><br>DIN 52913<br>(MPa)       | <b>Specific leak rate,</b><br>DIN 3535-6<br>(mg/s·m) |
| 11                                                     | 25 (50 MPa, 175 °C, 16 h)<br>- (50 MPa, 300 °C, 16 h) | 0,07                                                 |
| <b>Thickness increase,</b><br>ASTM F146<br>(%)         | <b>Compression modulus,</b><br>DIN 28090-2<br>(%)     | <b>Creep relaxation,</b><br>DIN 28090-2<br>(%)       |
| 8 (Oil IRM 903, 150 °C, 5 h)                           | 8,5 ( $\epsilon_{KSW}$ )                              | 5,1 ( $\epsilon_{KRW}$ )                             |
| 10 (ASTM Fuel B, 23 °C, 5 h)                           | 25 ( $\epsilon_{WSW/200\text{ °C}}$ )                 | 1,2 ( $\epsilon_{WRW/200\text{ °C}}$ )               |
| <b>Peak temperature</b><br>(°C/°F)                     | <b>Continuous temperature</b><br>(°C/°F)              | <b>Maximum pressure</b><br>(bar/psi)                 |
| 280/536                                                | 220/428                                               | 80/1160                                              |

pT-diagram



- General suitability
- Limited suitability
- Not recommended

| Recommended Media    |                         |                       |                               |
|----------------------|-------------------------|-----------------------|-------------------------------|
| Acetamide            | Copper sulfate          | Isopropanol           | Propane                       |
| Acetic acid 10 %     | Cyclohexane             | Kerosene              | Propylene                     |
| Acetylene            | Cyclohexanol            | Lead acetate          | Pthalic acid                  |
| Adipic acid          | Decalin                 | Lead arsenate         | Seawater / brine              |
| Air                  | Dextrin                 | Magnesium sulfate     | Soaps                         |
| Alum                 | Diphyl                  | Methane               | Sodium aluminate              |
| Aluminium acetate    | Ethane                  | Methanol              | Sodium bicarbonate            |
| Ammonium bicarbonate | Ethanol                 | Milk                  | Sodium bisulfite              |
| Ammonium chloride    | Ethylene                | Mineral oil           | Sodium carbonate              |
| Ammonium hydroxide   | Ethylene glycol         | Motor oil             | Sodium chloride               |
| Argon                | Formic acid 10 %        | Naphtha               | Sodium cyanide                |
| Asphalt              | Freon-12 (R-12)         | Nitrogen              | Sodium silicate (water glass) |
| Barium chloride      | Freon-134a (R-134a)     | Octane                | Sodium sulfate                |
| Benzene              | Fruit juices            | Oils (essential)      | Sodium sulfide                |
| Bio-diesel           | Fuel oil                | Oils (vegetable)      | Starch                        |
| Bio-ethanol          | Gasoline                | Oils, fuels           | Stearic acid                  |
| Borax                | Gelatin                 | Oleic acid            | Sugars                        |
| Boric acid           | Glycerine               | Palmitic acid         | Tar                           |
| Butadiene            | Glycols                 | Paraffin oil          | Toluene                       |
| Butane               | Helium                  | Pentane               | Transformer oil (mineral)     |
| Butyl alcohol        | Heptane                 | Petroleum             | Vinegar                       |
| Butyric acid         | Hydraulic oil (glycol)  | Potassium acetate     | Water                         |
| Calcium chloride     | Hydraulic oil (mineral) | Potassium bicarbonate | White spirits                 |
| Calcium hydroxide    | Hydrogen                | Potassium carbonate   | Xylenes                       |
| Carbon dioxide       | Iron sulfate            | Potassium chloride    | Zinc sulfate                  |
| Carbon monoxide      | Isobutane               | Potassium cyanide     |                               |
| Chlorine solution    | Isooctane               | Potassium iodide      |                               |
| Copper acetate       | Isoprene                | Potassium nitrate     |                               |