

# Material data sheet

## ALBROMET-A380

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|--------------------------|--|
| <b>ALBROMET-A380</b>     | <b>Aluminum bronze</b>   |
| Material properties      | Highest possible hardness (brittle hard), high abrasion resistance and compressive strength, excellent sliding properties.                       |
| Application examples     | Sliding partner for hardened steel grades, forming tools for bending, embossing, profiling and deep drawing of stainless steel sheets and tubes. |
| Machining notes          | Mechanical processing only with carbide-tipped tools.<br>Material can only be welded to a limited extent   |
| Typical analysis         | Al 15,0 %<br>Fe 5,0 %<br>Others 2,0 – 4,0 % max.<br>Cu Rest  |
| Standards/Specifications | Not standardized   |
| Delivery formats         | Forgings, castings, semi-finished products, finished parts according to drawing  |

| Mechanical and physical properties           |  |
|--|--|
| Hardness Brinell (HB 30)                     | 360 – 390  |
| Tensile strength $R_m$                       | $\geq 680 \text{ N/mm}^2$                                    |
| Yield strength $R_{p0,2}$                    | $\geq 560 \text{ N/mm}^2$                                    |
| Elongation at break A5                       | 0,5 %  |
| Density                                      | $7,2 \text{ g/cm}^3$   |
| Compressive strength                         | 1.500 MPa  |
| Elasticity modulus E                         | $120,0 \text{ kN/mm}^2$                                      |
| Mean linear coefficient of thermal expansion | $17,5 \cdot 10^{-6}/\text{K}$                                |
| Thermal conductivity at 20° C                | $34 \text{ W/m}\cdot\text{K}$                                |
| Electrical conductivity                      | $3,48 \text{ m/Ohm}\cdot\text{mm}^2$                         |
| Temperature resistance                       | $< 300^\circ \text{ C}$ up to clear change in strength value |
| Magnetic permeability                        | $1,03 \text{ H} = 100 \text{ Oe}$                            |

These data are based on information provided by our supplier, all changes reserved. The mechanical strength values are typical standard values and depends on the measurement and the production method. (Version: 07/2024).