# INMAFEED K1012

INMATEC Technologies GmbH

| Data Sheet | |
|---|---|
| **Product** | Zirconium Oxide $ZrO_2$ plus processing additives |
| **Ceramic powder** | $ZrO_2$, 94.5 %, partly $Y_2O_3$ - stabilized<br>TZ-3YS-E (Tosoh Corp.) |
| **Appearance** | White to greyish granulate material |
| **Product description** | Injection moulding feedstock for production of sintered ceramic components |
| **Theoretical density** | 6.05 g/cm$^3$ |
| **Shrinkage approx.** | 22 % corresponding |
| **Mold factor approx.** | 1.28 |
| **Processing temperature** | From feeding zone 150 °C to nozzle tip 160 °C |
| **Mold temperature** | 50 °C – 65 °C |
| **Debinding** | 2 step water & thermal<br>Particular conditions are depending on part dimension and design. |
| **Sintering temperature** | 1,500 °C in air |
| **Storage and Lifetime** | Product can be used for approx. 6 months after opening if stored dry at room temperature. Vessel has to be closed airtight thoroughly after feedstock withdrawal. |
| **Manufacturer** | **INMATEC Technologies GmbH**<br>Heerstrassenbenden 10<br>D- 53359 Rheinbach |

**Advice:** Due to the abrasive behaviour of ceramic powder we strongly recommend production with cylinder, screw and mold made from hard metal only.