

FRIALIT®-DEGUSSIT® HIGH-PERFORMANCE CERAMICS

SLIP-ON CRUCIBLES FOR THERMAL TESTING METHODS

Application:

Differential thermal analysis (DTA) and thermal gravimetric analysis (TGA)

Material:

Aluminium Oxide (Al₂O₃) DEGUSSIT AL23



Raw materials analysis and materials analysis use different thermal testing methods. When applying differential thermal analysis and thermal gravimetric analysis, material samples are subjected to specific heating and cooling starting at room temperature. The constant determination of temperature and weight of the material sample and reference sample helps draw indirect conclusions with respect to the chemical composition. The selection of the material for sample crucibles is crucial at temperatures above 1,000°C.

Crucibles made of DEGUSSIT AL23 do not outgas or react chemically with the sample material thus ensuring precise measurement. When temperatures below the crucible are measured using a thermocouple, there is hardly any loss due to the high thermal conductivity of DEGUSSIT AL23 thus ensuring accurate measurements at minimum temperature changes.

The exceptional temperature resistance of DEGUSSIT AL23 ensures highest precision, reproducibility and long-term stability at temperatures up to 1,950°C.

Our product range comprises slip-on crucibles in different sizes and volumes from approx. 0.11 ml to 3.5 ml. Large crucibles are used when testing high-volume and low-density substances such as foams.

Slip-on crucibles made of FRIALIT-DEGUSSIT High-Performance Ceramics are suitable for common DTA analytical equipment.

Fields of Application:

- Any field of raw material and materials analysis
- Research and development departments in the field of materials development

- Highly resistant to temperatures
- High thermal conductivity
- Chemically neutral

Competence in Advanced Ceramics
Engineering for customized solutions