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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 6901.3-2004

**Chemical analysis of silica refractories -- Part 3: Determination
of silicon dioxide -- Hydrofluoric acid gravimetric method
(English Translation)**

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1 Scope

This part specifies the hydrofluoric acid gravimetric method to determine silicon dioxide.

This part applies to the determination of silicon dioxide in silica refractories.

Measuring range (mass fraction) is greater than 95.00%.

2 Normative references

GB/T 6901.1-2004 Chemical analysis of silica refractories - Part 1.Determination of loss on ignition - Gravimetric method

GB/T 8170 Rules of rounding off for numerical values & expression and judgement of limiting values

GB/T 10325 Shaped refractory products - Rule of acceptance, sampling and inspection

GB/T 17617 Refractory products - Sampling of raw materials and unshaped products

3 Principle

After the sample is burned to the constant, USE hydrofluoric acid and nitric acid to dissolve. EVAPORATE it to remove the silicon. Then USE nitrate to remove fluoride.

BURN at 1000 °C - 1100 °C to constant weight. The difference between the 2 weighings is

the amount of silicon dioxide.

4.1

Nitrate (rho1, 42 g/mL).

4.2

Hydrofluoric acid (40%).

- Test date.

GB/T 5072-2023 | GB/T 5988-2022 | GB/T 3007-2006 | GB/T 2999-2025 |