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

GB/T 15076.9-2008

Replacing GB/T 15076.9-1994

**Methods for chemical analysis of tantalum and niobium -
Determination of iron, chromium, nickel, manganese, titanium,
aluminum, copper, tin, lead and zirconium contents in tantalum**

钽铌化学分析方法 钽中铁、铬、镍、锰、钛、铝、铜、锡、铅和锆量的测定

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1 Scope

GB/T 15076.9-2008 is the Chinese national standard on methods for chemical analysis of tantalum and niobium - determination of iron, chromium, nickel, manganese, titanium, aluminum, copper, tin, lead and zirconium contents in tantalum, in the field of metallurgy. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 31 March 2008 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 September 2008. Classification: ICS 77.120.99, CCS H14. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

0.020 Manganese, titanium, tin, lead, zirconium 0.00010 to

0.040 Iron, chromium, nickel 0.00030 to 0.040

2 Method summary

The tantalum metal and burning compound is converted to an oxide, with a certain proportion of carbon and sodium chloride mixture as carrier, DC arc anode Excitation spectral quantitatively.

3 Reagents and materials

Unless otherwise indicated in the analysis using only recognized as analytical grade reagents and distilled water or equivalent purity.

3.1 tantalum pentoxide. the tantalum powder (purity $\geq 99.99\%$) at 1000 °C burning made matrix stored separately.

3.2 ferric oxide. pure spectrum.

3.3 chromium oxide. pure spectrum.

3.4 nickel oxide. pure spectrum.

3.5 manganese tetroxide. pure spectrum.

3.6 Titanium dioxide. pure spectrum.

3.7 aluminum oxide. pure spectrum.

3.8 copper oxide. pure spectrum.

3.9 SNO. pure spectrum.

3.10 Lead dioxide. pure spectrum. Zirconium dioxide 3.11. pure spectrum.

3.12 germanium dioxide. pure spectrum.

3.13 Sodium chloride. pure class distinctions, at 500 °C burning 2h.

3.14 Palladium. purity of more than 99.95%.

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