

KES

Method of Production Potassium
Standard Solution for Atomic
Absorption Spectroscopy

KES T – L137

(EST.) 1990 – 09 – 20

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Quoted Standard

1. Scope of Application

This standard shall regulate method to produce potassium standard solution or regulated solution and preserving method used at atomic absorption spectroscopy.

2. Standard Material for Production Standard Solution

Use high purity metal and high purity reagent as material used in production of standard solution at atomic absorption spectroscopy of steel and that raw material.

(1) High purity metal

Use fat-removed dry metal as thing of which purity is more than 99.9 % and which is melted easily. Also in case that oxide film of high purity metal is organized, use immediately through washing and drying it with methyl alcohol after washing and melting oxide film with thin hydrochloric acid in advance.

(2) Reagent

Oxide, chloride, carbonate and etc of metal shall be used mainly. Reagent should be used what is more than 1st class at least and especially should select stable compound that efflorescence, deliquescence, chemical change is not produced. At this time if needed, should dissolve with acid through drying at uniform temperature after eliminating impurity with method of re-crystallization, re-deposition, sublimation and etc, boil it sufficiently and re-dissolve extracted material with water through drying and evaporating at needed case. At dissolving take care so that loss or contamination is not produced by covering watch dish.

3. Preserving Method

What to know composition of material to be standard shall become important fact to determine preserving quality of preserved solution and precision of spectroscopy and