

KES

Indium Standard Solution
Manufacturing Standard
for Atom Ray Analysis

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1. Scope of Application

This shall regulate manufacturing method or preservation method of indium standard solution or regulated solution used for atom ray analysis.

2. Standard Material for Standard Solution Manufacturing

Use high purity metal or sample for standard solution for atom ray analysis of steel and raw material.

(1) High purity metal

This shall be 99.9 % purity and piece type soluble metal dried and fat-free. In case of oxidized film, solve and remove it with light hydrochloric acid and wash it with water and methyl alcohol and use it.

(2) Sample

Use metal oxidized, chlorized and carbonized salt. Use 1st grade sample and select stable chemical free from weathering, deliquescence and chemical change. If necessary, remove alien material with re-crystallization, re-precipitation and sublimation and dry it and solve it with acid and boil it and distill it and reuse extract with water. When solving, cover clock dish and prevent loss and pollution.

3. Preservation Method

Composition of standard material is important to preservation and accuracy of analysis and density of solution is adequate to be 0.05 ~ 0.1 % and possible to preserve it for several weeks or months. Make light solution frequently to prevent density change and for very light solution ($\leq 1\text{ppm}$), manufacture for every use. if necessary add preservative such as acid.