

DIN EN ISO 7097-1:2026-10 (E)

Nuclear fuel technology - Determination of uranium in solutions, uranium hexafluoride and solids - Part 1: Iron(II) reduction/potassium dichromate oxidation titrimetric method (ISO 7097-1:2025); English version EN ISO 7097-1:2026

Contents

Page

Foreword.....	iv
Introduction.....	v
1 Scope.....	1
2 Normative references.....	1
3 Terms and definitions.....	1
4 Principle.....	1
5 Reactions and interferences.....	2
5.1 Reactions.....	2
5.2 Interferences.....	2
6 Reagents.....	3
7 Apparatus.....	6
8 Sample preparation.....	7
8.1 General.....	7
8.2 Uranium metal.....	7
8.3 Uranium dioxide pellets.....	7
8.4 Uranium oxide powder (UO ₂ , UO ₃ , U ₃ O ₈).....	7
8.5 Uranium hexafluoride.....	8
8.6 Uranium nitrate hexahydrate.....	8
9 Procedure.....	8
10 Expression of the results.....	9
10.1 General.....	9
10.2 Method of calculation.....	9
10.2.1 Linear interpolation.....	9
10.2.2 Calculation for the test solution.....	10
10.2.3 Calculations for samples.....	10
10.2.4 Average atomic mass.....	10
10.3 Repeatability.....	11
10.4 Bias.....	11
11 Test report.....	11
Annex A (normative) Uranium hexafluoride sampling and preparation of the test solution.....	12
Annex B (informative) Expression of results for samples.....	14
Bibliography.....	15