

ISO 13548:2025-08 (E)

Copper and zinc sulfide concentrates - Determination of fluorine content by sodium hydroxide fusion and fluoride ion selective electrode detection

Contents		Page
Foreword		iv
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Principle	2
5	Reagents	2
6	Apparatus	3
7	Instrument operating parameters	4
8	Sampling and sample preparation	4
8.1	Laboratory sample	4
8.2	Test sample	4
9	Procedure	4
9.1	Number of determinations	4
9.2	Test portion	4
9.3	Blank test	5
9.4	Dissolution of the test portion by NaOH fusion	5
9.5	Leaching	5
9.6	Preparation of the leach solution	5
9.7	Preparation of solution for introduction to fluoride ion selective electrode	6
9.8	Preparation of the calibration solutions and stabilization solution	6
9.9	Preparation of fluorine calibration	6
9.9.1	General	6
9.9.2	Conditioning of the fluoride ion selective electrode	6
9.9.3	Potential stabilization	7
9.9.4	Temperature control	7
9.9.5	Electrode handling for concentration measurement	7
9.9.6	Procedure for reducing measurement variability	7
9.9.7	Calibration graph plotting method	7
9.10	Determination of fluorine content in the test solutions	7
10	Calculations	7
11	Procedure for obtaining the final result	9
12	Test report	9
13	Precision	9
13.1	Expression of precision	9
13.2	Procedure for obtaining the final result	10
13.3	Interlaboratory precision	10
13.4	Check of trueness	11
13.4.1	General	11

13.4.2	Type of certified reference material or reference material	11
	Annex A (normative) Procedure for obtaining the final results	12
	Annex B (informative) Procedure for the preparation and determination of the mass of a predried test portion	13
	Annex C (informative) Trueness test	15
	Bibliography	18