

Indian Standard

**METHODS OF SAMPLING AND TEST
(PHYSICAL AND CHEMICAL) FOR
WATER AND WASTEWATER**

PART 42 COPPER

(*First Revision*)

1 SCOPE

1.1 This standard prescribes four methods for determination of copper as follows:

- a) Neocuproine method,
- b) Atomic absorption method (direct),
- c) Atomic absorption method (chelation extraction), and
- d) Differential pulse anodic stripping voltammetry.

1.2 The choice or the method depends upon the concentration range and interference. When the concentration levels are below 500 g/l, pre-concentration is carried out either by chelation and extraction prior to atomic absorption spectrophotometer (AAS) or by depositing as in differential pulse anodic stripping voltammetry method. For dissolved copper content filtration through 0.45 μm membrane filter is required.

2 REFERENCES

2.1 The following, Indian Standards are the necessary adjuncts to this standard:

<i>IS NO.</i>	<i>Title</i>
3025 (Part 1) : 1986	Methods of sampling and test (physical and chemical) for water and wastewater: Part I Sampling
7022 (Part 1) : 1973	Glossary of terms relating to water, sewage and industrial effluents: Part 1
7022 (Part 2) : 1979	Glossary of terms relating to water, sewage and industrial effluents: Part 2