

## **Indian Standard IS 26: 2024 Tin Ingot- Specification**

The standard covers the requirement of refined tin in the form of ingots, produced from **ore or, secondary tin-bearing materials**, or a combination of both to obtain the requirements of this specification and may be manufactured by **fire refining**, **vacuum refining**, **electrolytic or electrowinning refining** methods, or a combination of these methods.

IS 26: 2024 covers 6 grades of refined tin ingots in accordance with their minimum tin content which are **Sn99.75**, **Sn99.85**, **Sn99.90**, **Sn99.93**, **Sn99.95** & **Sn99.99** and ensures that the trace elements like Sb, As, Bi, Cd, Cu, Fe, Pb, Al, Zn remain within specified limits, ensuring high-quality re-melting properties. These specifications help guarantee the tin's suitability for use in electroplating, tin plating, soldering and other precision industries.

To ensure compliance, chemical analysis of Tin Ingot shall be done as per **IS 1940: 1969** or by any other established instrumental/wet chemical method. Rigorous testing and spectrochemical analysis verify that each ingot meets the defined purity and composition criteria.

Additionally, **IS 26** provides guidelines for sampling, packaging, marking, and traceability, ensuring the ingots are delivered with the necessary documentation for consumers to verify their quality and authenticity.

By setting these comprehensive benchmarks, IS 26:2024 promotes the production of high-quality refined tin, aligning with industry needs and enhancing consumer confidence in its reliability for precision industrial applications.