

IS 1251: 1988
Zinc Phosphide, Technical –Specification
(Third Revision)

Zinc phosphide (Zn_3P_2) is widely used **rodenticide** for the control of bandicoots, rats and mice. It acts as a stomach poison, reacting with gastric juices to release phosphine gas, which is lethal to rodents. The material appears as a dark grey, heavy, and free-flowing powder with a characteristic garlic odor.

To be effective as a rodenticide, the product should be of high purity and having fine particle size for easy handling and application. It should also be free from unwanted contaminants like sulphides that could affect performance. Proper packaging and labeling are also essential for safe storage, transportation, and application.

IS 1251: 1988 specifies requirements and testing methods to ensure good quality and safety. It mandates a **minimum of 80% zinc phosphide content** to be potent. The particle size requirement ensures that at least **92% of the material passes through a 106-micron sieve for uniform application**. The product must be **free from sulphides**, as confirmed by standard tests that check for the absence of yellow cadmium sulphide precipitate.

For safe handling and compliance with regulations, the standard prescribes packaging and marking requirements in line with IS 8190. Containers must be securely packed and clearly labeled with details such as the batch number, date of manufacture, and cautionary statements as per the Insecticides Act. The standard also provides detailed testing procedures for determining zinc phosphide content, zinc content, and the absence of sulphides, ensuring consistency and reliability in product quality.