



**IS 1832:1978**  
**Specification for Malathion, Technical**  
**(First Revision)**

**Agriculture** is gaining increasing prominence in **global GDP** and is steadily emerging as one of the largest and most significant industries worldwide. The role of pesticides in aiding the growth of agriculture as an industry is undeniable. **Pesticides** are **chemical substances** that are used to **control or eliminate pests** or species that have an **adverse effect** on agricultural or horticultural production. Pesticides are widely used to **protect crops, increase crop yields, and prolong the life of produce** in storage. Pesticides can be classified into- **insecticides, herbicides, fungicides, rodenticide**, etc., based on the type of pests they are used to control or eliminate.

**Malathion, technical**, is used in the preparation of **insecticide formulations** required to control insects attacking fruits, vegetables, landscaping plants and shrubs. Malathion is the common name for **S-I, 2-di (ethoxycarbonyl) ethyl 0, O-dimethyl phosphorodithioate**, accepted by ISO.

Consumers expect any pesticides (in this case, malathion) to be **pure, free from extraneous impurities, with reduced moisture content, insoluble matter**. Consumers do also expect proper labelling and marking on the insecticides that would give them information regarding the manufacturing details and the content of the **active ingredient i.e. Malathion**, in percent by mass.

This standard specifies the requirements for Malathion, technical, including **description** and requirements prescribed for **Malathion content, moisture content, acidity (as Sulphuric acid) percent, insoluble matter in acetone, and specific gravity**. Malathion content can be determined either by using the **pure Standard malathion**, or by using **Potassium salt of 0,0 dimethyl phosphorodithioic acid**, as specified in this first revision of the standard.

The methods of sampling and tests for malathion, technical, are also addressed in the standard. Additionally, the standard also lays down packing and marking requirements, in addition to the provisions of **Insecticides Acts and Rules**.