



## **IS 16131 : 2015 Imidacloprid Suspension Concentrate (SC) — Specification**

**Imidacloprid, Suspension Concentrate (SC)** is an **insecticide** that is used for protecting buildings (pre- and post-construction) from **termite attack** and is generally manufactured to contain the active ingredient Imidacloprid at a concentration of 30.5% (m/m). Imidacloprid is the accepted common name by the ISO for 1-[(6-chloro-3-pyridinyl) methyl]-N-nitro-2-imidazolidinimine having empirical formula  $C_9H_{10}ClN_5O_2$ .

IS 16131 was first published in the year 2015, giving due consideration to the provisions of the ***Insecticides Act, 1968*** and the Rules framed thereunder. This standard prescribes the requirements and the methods of sampling and test for Imidacloprid, SC.

**Imidacloprid, SC** shall be in the form of viscous liquid free from extraneous matter and shall readily form a suspension, on dilution with water, suitable for spray. In addition, the standard also prescribes other physical requirements for ascertaining the quality of the insecticide such as **Pourability** (Rinsed Residue), **Spontaneity of Dispersion**, **Suspensibility**, **Wet Sieve Test** and **Persistent Foam**, along with their test methods.

For determining the **active ingredient** i.e., Imidacloprid, the standard refers to the test method involving **high performance liquid chromatography (HPLC)** equipped with UV-VIS detector using internal standard technique. The observed Imidacloprid content, percent (m/m), of the sample shall not differ from the declared **nominal value** by more than the percent tolerance limits given in the standard, wherein for the most commonly manufactured concentration of 30.5%, a tolerance of  $\pm 5\%$  is prescribed. The standard further stipulates that the **acidity** (as  $H_2SO_4$ ) or **alkalinity** (as NaOH) of the material shall not be more than 0.2 percent by mass.

The requirements for packing, marking and sampling are also prescribed in the standard.

As on Oct 2024, there are five (05) BIS licenses for this product in the country.