Sr. No. in Scope NABL / NON NABL

**Flow chart to determine flash point for Pesticide formulations**

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| **Date of Analysis** | |  |
| **Sl. No.** | Step | | **Execution** | **Executed By** | |
| 1. | Sample No. | |  |  | |
| 2. | Name of Sample | | | | |
| **3.** | **Procedure:** | |  | | |
| 3.1 | Fill the water bath completely and the air chamber which surround the oil cup to a depth of ateast 38 mm, with water. | |  |  | |
| **3.2** | Cool the bath to -27°C or to at least 9°C below the expected flash point of the material being tested whichever is higher measuring the temperature with the thermometer. | |  |  | |
| 3.3 | Cool the sample in its container to at least 17° below the flash point before opening. | |  |  | |
| 3.4 | Place the thermometer in position in the cover of the cup, loosely assemble the cover and cup, and cool until the thermometer registers at least 17°C below the expected flash point. Place the cup in the water bath. | |  |  | |
| 3.5 | Pour the sample without undue agitation, avoiding as far as possible the formation of air bubbles, until the level reaches the point of the index gauge on the wall of the cup. | |  |  | |
| 3.6 | Ignite the test flame, adjust its size to about 3.8 mm diameter and maintain it throughout the test. | |  |  | |
| 3.7 | Stir in clockwise direction, to give a downward thrust at approximately 30 rpm, Apply heat to the outer bath in such a manner that the temperature of the sample in the oil cup rises at the rate of 1°C/min. | |  |  | |
| 3.8 | When the temperature of the sample reaches at least 9°C below the expected flash point apply the test flame by slowly and uniformly opening the slide in the cover. | |  |  | |
| 3.9 | Apply the test flame in this manner after every 0.5°C rise in temperature until a distinct flash occurs in the interior of the cup.(or until 25° C is reached). | |  |  | |
| 3.10 | Record the temperature of the sample when flash occurs and also the barometer pressure in mm Hg. | | **°C** |  | |

**4. Calculation:**

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| Correct the observed flash point by the following expression  **Corrected flash point = C +0.033(760-H)** | where  C= Observed flash point ° C  H= Barometric pressure in mm Hg |

**5.Result:**

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| **Flash point of the sample is** | **°C** | **IS: 1448 (p:20): 1998** |

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| Analyzed by | Name |  |
| Dated signature |  |
| Checked by | Name |  |
| Dated signature |  |