

<b>Laboratory</b>	<b>Insight Tobaccocraft Institute (R &amp; D Department of Godfrey Phillips India Limited), Plot No. 19, MIDC, TTC Industrial Area, Rabale, Navi Mumbai, Maharashtra</b>		
<b>Accreditation Standard</b>	<b>ISO/IEC 17025: 2005</b>		
<b>Discipline</b>	<b>Chemical Testing</b>	<b>Issue Date</b>	<b>11.03.2016</b>
<b>Certificate Number</b>	<b>T-0801</b>	<b>Valid Until</b>	<b>10.03.2018</b>
<b>Last Amended on</b>	<b>01.04.2016</b>	<b>Page</b>	<b>1 of 2</b>

<b>S. No.</b>	<b>Product / Material of Test</b>	<b>Specific Test Performed</b>	<b>Test Method Specification against which tests are performed</b>	<b>Range of Testing / Limits of Detection</b>
<b>I.</b>	<b>FOODS &amp; AGRICULTURAL PRODUCTS</b>			
<b>1.</b>	<b>Tobacco and Tobacco Products</b>			
<b>a.</b>	<b>Cigarette</b>	Determination of total (TPM) and nicotine-free dry particulate matter (Tar)	ISO 4387: 2000 GPI/SOP/03 Issue No.: 7 Issue Date: 29.08.2013	TPM: (8 mg to 30 mg)/Cigarette Tar: (6 mg to 27 mg)/Cigarette
		Determination of nicotine in smoke condensates	ISO 10315: 2013 (E) GPI/SOP/04 Issue No.: 7 Issue Date: 17.12.2013	(0.8 mg to 2.3 mg)/ Cigarette
		Determination of water in smoke condensates	ISO 10362: 1999 GPI/SOP/05 Issue No.: 7 Issue Date: 29.08.2013	(0.1 mg to 5.0 mg)/ Cigarette
		Determination carbon monoxide in vapour phase of cigarette smoke	ISO 8454: 1995 GPI/SOP/12 Issue No.: 7 Issue Date: 29.08.2013	(5 mg to 25 mg)/Cigarette
		Determination of Menthol in Cigarette Smoke condensate, Bobbins, Tobacco and Menthol Rods	ISO 13110: 2012 GPI/SOP/15 Issue No.: 7 Issue Date: 21.08.2013	Bobbins – 100 mg/m to 1000 mg/m Tobacco–0.1 mg to 10 mg Smoke condensate – (0.01 mg to 10 mg)/ Cigarette
		Determination of Humectants in whole Tobacco.	Health Canada, T-304 GPI/SOP/24 Issue No.: 7 Issue Date: 21.08.2013	Propylene Glycol – 0.1 % to 5 % Glycerine – 0.1 % to 5 %

**Laboratory** Insight Tobaccocraft Institute (R & D Department of Godfrey Phillips India Limited), Plot No. 19, MIDC, TTC Industrial Area, Rabale, Navi Mumbai, Maharashtra

**Accreditation Standard** ISO/IEC 17025: 2005

**Discipline** Chemical Testing **Issue Date** 11.03.2016

**Certificate Number** T-0801 **Valid Until** 10.03.2018

**Last Amended on** 01.04.2016 **Page** 2 of 2

S. No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
b.	Tobacco	Total Alkaloids content	Total Alkaloids: ISO 15152: 2003	Alkaloids: 1.0 % to 3.0 %
		Total Reducing Sugars	Total Reducing Sugars: ISO 15154: 2003	Total reducing Sugars: 4.0 % to 15.0 %
		Chloride content	Chloride – Bran and Lube G-267-01 GPI/SOP/23 Issue No.: 7 Issue Date: 29.08.2013	Chloride 0.5 % to 2 %
		Estimation of Ammonia in Tobacco and Tobacco extract	Coresta-35 and Skalar-155-922 GPI/SOP/23 Issue No.: 7 Issue Date: 29.08.2013	0.02 % to 1 % / 2 ppm to 100 ppm
		Determination of Nitrate in Tobacco and Tobacco extract	Coresta-36 and Skalar-155-912 GPI/SOP/23 Issue No.: 7 Issue Date: 29.08.2013	0.02 % to 1 % / 2 ppm to 100 ppm

-X-X-X-X-X-X-X-X-X-X-X-X-