



सीएसआईआर - के० ख० एव० ई० अ० सं० परीक्षण प्रकोष्ठ

CSIR - CIMFR TESTING CELL



TEST CERTIFICATE / परीक्षण प्रमाण पत्र ORIGINAL COPY

 FORMAT NO.: (CIMFR-DQM-FLP02: F-01:REV-01)  
 (Flame & Explosion Laboratory)

ID NO.: 51/16

CODE NO. FLP/201/15-16

**Result # B1: Determination of Explosion pressure (Reference Pressure Test) \*:**

Gas mixture: Test with 8% Ethylene in air .

No. of tests: 3 nos. test with single enclosure.

Test Condition: Enclosure fitted with component and clause 15.1.2.1

Type of Test	Gas Group	Gas Mixture % in Air		No. of Tests	
Preliminary Test (reference pressure)	IIB	8% Ethylene in air		Three	
Test Ref. No.	Ignition	Gauge Position	Max. Pressure in Bar	Time of Pressure rise in millisecond	Remark
Single Enclosure					
PPM/511601	Body	Body	3.59	6.54	No evidence of distress
PPM/511602	Body	Body	3.44	6.6	-do-
PPM/511603	Body	Body	3.67	6.66	-do-

\*Results shown for the pressure time curve (enclosed) are the highest recorded value obtained in the test.

**Result #B2: Overpressure Test (Static Method):** Hydraulic pressure test is conducted as per Cl. 15.1.3.1 of IS/IEC 60079-1: 2007.

Enclosure	Test reference no.	Over pressure (kg/cm <sup>2</sup> ) maintained for 1 min.	Remark
Single Enclosure	OPM/511604	10.0 kg/cm <sup>2</sup>	No damage or deformation

**Result #B3: Test for Non transmission of internal ignition:**

Gas Mixture: Test with 37% Hydrogen in air for Gas Gr. IIB .

No. of Tests: 5 nos. tests with Single enclosure.

Test Condition: Clause 15.2, Table G and 15.2.1.1 (No precompression required)

Name of Enclosure	Test Ref. Nos.	Gas Group	Gas Mixture % in Air	No. of Test	Result
Single Enclosure	EIT/511605 to EIT/511609	IIB	37 % Hydrogen	Five	Pass