SCHEME OF TESTING AND INSPECTION
FOR CERTIFICATION OF
PRESSURE SENSITIVE ADHESIVE INSULATING TAPES
FOR ELECTRICAL PURPOSES
(PLASTICIZED POLYVINYL CHLORIDE TAPES
WITH NON-THERMOSETTING ADHESIVE)
ACCORDING TO IS 7809 (Pt 3/Sec 1) – 1986
(INCLUDING AMENDMENT NO. 1)

1. LABORATORY – A laboratory shall be maintained which shall be suitably equipped and staffed, where different tests given in the specification shall be carried out in accordance with the methods given in the specification.

1.1 All testing apparatus shall be periodically checked and calibrated and records of such checks/calibration shall be maintained.

2.0 TEST RECORDS - All records of tests and inspection and shall be kept in suitable forms approved by the Bureau.

2.1 Copies of any records and other connected papers that may be required by the Bureau shall be made available at any time on request.

3.0 QUALITY CONTROL – It is recommended that, as far as possible, Statistical Quality Control (SQ.) methods may be used for controlling the quality of the product during production as envisaged in this Scheme [See IS 397(Part 1):2003, IS 397(Part 2):2003 and IS 397(Part 3):2003].

3.1 In addition, effort should be made to gradually introduce a Quality Management System in accordance with IS/ISO 9001.

4.0 STANDARD MARK – Each roll of the tape shall carry the standard mark as given in Column (1) of the First Schedule of the licence, provided always the roll of tape to which this mark is applied conforms to every requirements of the specification.

4.1 The standard mark shall be applied in such a manner that as far as possible, the standard mark gets destroyed when the roll is opened so as to avoid its misuse.

4.2 MARKING - Each label of an insulating tape or its wrapper, or a package containing unit or a number of unit rolls of tape or the central paper core on which the tape is wrapped shall have the following in formation clearly and indelibly marked on it:

   a) Designation of the tape
   b) Appearance of the tape, for example, transparent, uncoloured, opaque-blue etc;
   c) The nominal width of the tape;
   d) The nominal length of the tape on each roll;
   e) The nominal thickness of the tape;
   f) Manufacturer’s or supplier’s identification mark and batch number,
   g) Country of manufacture;
   h) Month and year of manufacture; and
   i) The declared month and year of expiry, if applicable
5.0 **LEVELS OF CONTROL** - The tests, and inspection indicated in Table 1 attached and at the levels of control specified therein, shall be carried out on the whole production records and charts maintained in accordance with paragraph 2 above. On the basis of test results decision regarding conformity or otherwise of the control unit shall be taken. All the production which conforms to the Indian Standards and covered by the licence shall be marked with certification mark of the Bureau.

5.1 **CONTROL UNIT**– For the purpose of this scheme, the production of tapes of one type manufactured under similar conditions from the same consignment of raw material and in one shift shall constitute a control unit.

5.2 On the basis of testing and inspection results, decision regarding conformity of otherwise of the control unit as a whole to the requirements of the specification shall be taken as given in Table 1.

5.3 **RAW MATERIAL**– The raw material used should conform to the relevant Indian standards wherever they exist. The raw material may be procured marked with certificate Mark of the Bureau or the firm may get each consignment tested in their laboratory or in an independent laboratory for ascertaining its conformity to the relevant specification. The relevant test records shall be maintained and made available at any time on request.

5.4 Whenever a licence procures log rolls from outside sources and only the splitting of the log rolls to required sizes and the packing of individual rolls of tapes are undertaken, the tests as indicated in table 2 and at the levels of control specified therein, shall be carried out on each consignment of log rolls received by the licensee. The relevant test records shall be maintained and made available at any time on request.

6.0 **REJECTIONS** – A separate record shall be maintained giving information relating to the rejection of the production not conforming to the requirements of the specification and the method of its disposal. Such material shall in no circumstances be stored together with that conforming to the specification.

7.0 **SAMPLES** – The licensee shall supply, free of charge, the samples required in accordance with the Bureau of Indian Standards (Certification) Regulations, 1988, as subsequently amended, from the factory or godowns. The Bureau shall pay for the samples taken by it from the open market.

8.0 **REPLACEMENT** – Whenever a complaint is received soon after the goods with Standard Mark have been purchased and used, and if there is adequate evidence that the goods have not been misused, defective goods are replaced free of cost by the licensee in case the complaint is proved to be genuine and the warranty period (where applicable) has not expired. The final authority to judge the conformity of the product to the Indian Standard shall be with the Bureau. The firm shall have own complaint investigation system as per IS 15400.

8.1 In the event of any damages caused by the goods bearing the Standard Mark, or claim being filed by the consumers against BIS Standard Mark and not “conforming to” the relevant Indian Standard, entire liability arising out of such non conforming product shall be of licensee and BIS shall not in any way be responsible in such cases.
9.0 **SUSPENSION OF MARKING**— The marking of the product shall be stopped under intimation to the Bureau if, at any time, there is any difficulty in maintaining the conformity of their product to the specification, or the testing equipment goes out of order. The marking may be resumed as soon as the defects are removed under intimation to Bureau.

9.1 The marking of the product shall be stopped immediately if directed to do so by Bureau for any reason. The marking may then be resumed only after permission by the Bureau. The information regarding resumption of markings shall also be sent to the Bureau.

10.0 **PRODUCTION DATA** – The licensee shall send to BIS as per the enclosed proforma-1 to be authenticated by a Chartered Accountant a statement of quantity produced, marked and exported by him and the trade value thereof at the end of each operative year of the licence.

Table 1………. 
<table>
<thead>
<tr>
<th>Cl.</th>
<th>Requirement</th>
<th>Test Details</th>
<th>LEVELS OF CONTROL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Test Methods</td>
<td>No. of specimen</td>
</tr>
<tr>
<td>3.1</td>
<td>General requirements</td>
<td>4.1&amp;5.1</td>
<td>IS 7809 (Pt.1):1975</td>
</tr>
<tr>
<td>3.2 to 3.4</td>
<td>Dimensions</td>
<td>9</td>
<td>IS 7809 (Pt.1):1975 &amp; IS 7809 (Pt.2):1977</td>
</tr>
<tr>
<td>4.1</td>
<td>Tensile strength</td>
<td>9</td>
<td>IS 7809 (Pt.2):1977</td>
</tr>
<tr>
<td>4.2</td>
<td>Adhesion to steel</td>
<td>10.3.2</td>
<td>-do-</td>
</tr>
<tr>
<td>4.3</td>
<td>Adhesion to backing</td>
<td>10.3.3</td>
<td>-do-</td>
</tr>
<tr>
<td>4.4</td>
<td>Electrical strength at room temperature</td>
<td>12</td>
<td>-do-</td>
</tr>
<tr>
<td>4.9</td>
<td>Insulation resistance test</td>
<td>4</td>
<td>IS 8516</td>
</tr>
</tbody>
</table>
TABLE 1 LEVELS OF CONTROL
(Para 5 of the Scheme of the Testing and Inspection)

<table>
<thead>
<tr>
<th>Cl.</th>
<th>Requirement</th>
<th>Test Methods</th>
<th>No. of specimen</th>
<th>Lot size</th>
<th>Frequency</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.5</td>
<td>Electric strength after humid conditions</td>
<td>13 -do-</td>
<td>1</td>
<td>Every Seventh control unit of each type</td>
<td>In case of failure, marking shall be suspended, cause of failure investigated and necessary modifications made</td>
<td></td>
</tr>
<tr>
<td>4.6</td>
<td>Flammability</td>
<td>6 -do-</td>
<td>1</td>
<td>-do-</td>
<td></td>
<td>Two samples from modified production shall be tested and marking resumed only if the both samples pass.</td>
</tr>
<tr>
<td>4.7</td>
<td>Electrolytic corrosion</td>
<td>4 -do-</td>
<td>1</td>
<td>-do-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.8</td>
<td>Stability to accelerated Ageing</td>
<td>App A</td>
<td>IS 7809 (Pt.3/Sec 1)-1986</td>
<td>1</td>
<td>Every fifteenth control unit of each type</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Storage life</td>
<td>7.1 -do-</td>
<td>5 rolls</td>
<td>Once in a year for each colour &amp; thickness</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NOTE:- (i) A sample would consist of number of specimens as stipulated in individual test method.

(ii) In case table 2 applies the tests for raw material as indicated in clause 3.1) and the tests indicated in clause 4.1 and 4.6 need not be repeated.
### IS 7809 (Part 3/Sec1)-1986
Pressure Sensitive adhesive Insulating Tapes for Electrical Purpose with non Thermosetting adhesive
### TABLE 2 LEVELS OF CONTROL ON LOG ROLLS
(Para 5.4 of the Scheme of Testing and Inspection)

<table>
<thead>
<tr>
<th>Cl.</th>
<th>Requirement</th>
<th>Test Methods</th>
<th>No. of specimen</th>
<th>Lot size</th>
<th>Frequency</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>Appearance and colour</td>
<td>4.1</td>
<td>Each log roll</td>
<td></td>
<td>Each consignment/lot of log rolls not exceeding 100 log rolls</td>
<td>In case of failure twice the number of samples shall be taken from each consignment/lot and tested. In case of any failure in the retesting the entire consignment/lot shall be rejected.</td>
</tr>
<tr>
<td>3.1</td>
<td>Freedom from defects</td>
<td>5.1</td>
<td>3</td>
<td></td>
<td>-do-</td>
<td></td>
</tr>
<tr>
<td>3.1</td>
<td>Core diameter</td>
<td>6.1</td>
<td>3</td>
<td></td>
<td>-do-</td>
<td></td>
</tr>
<tr>
<td>3.3</td>
<td>Length</td>
<td>6.3</td>
<td>3</td>
<td></td>
<td>-do-</td>
<td></td>
</tr>
<tr>
<td>3.4</td>
<td>Thickness</td>
<td>3., 7809 (Pt2): 1997</td>
<td>3</td>
<td></td>
<td>-do-</td>
<td></td>
</tr>
<tr>
<td>4.4</td>
<td>Electric Strength at room temperature</td>
<td>12</td>
<td>3</td>
<td></td>
<td>-do-</td>
<td></td>
</tr>
<tr>
<td>4.1</td>
<td>Tensile Strength</td>
<td>9</td>
<td>3</td>
<td></td>
<td>-do-</td>
<td></td>
</tr>
<tr>
<td>4.6</td>
<td>Flammability</td>
<td>6</td>
<td>3</td>
<td></td>
<td>-do-</td>
<td></td>
</tr>
</tbody>
</table>
PROFORMA FOR OBTAINING PRODUCTION DETAILS

Period covered

Name of licensee

CM/L No.

Name of Articles (s)     IS No.
Grade/Type/Size/Variety/Class/Rating

1.1 Brand/Trade/Name(s) of BIS Certification Marked Products

2.0 Total production of the articles(s) licensed for certification marking

2.1 Total production of the article(s) conforming to Indian Standard

3.0 Production covered with BIS Certification Mark and its value

   a) Quantity
   b) Value (Rs.)

3.1 Brand Name used on production covered under BIS Certification Mark

3.2 Calculation of marking fee on unit-rate basis; Marking Fee per unit

   a) Unit
   b) Quantity covered with BIS Certification Mark
   c) Marking fee rounded off in whole rupees as obtained by applying unit rates given in (a) on quantity given in (b)

Note: Incase a clause is not applicable, suitable remarks may be given against it.
4.0 Quantity not covered with BIS Certification Mark. If any, and the reasons for such non-coverage

4.1 Brand Name under which non-certified goods were sold

5.0 Quantity Exported with BIS Standard Mark and its value

5.1 Brand Name under which BIS Certified goods are exported

6.0 Authentication by Chartered Accountant or by the manufacturer by giving an affidavit/undertaking