



# CORPORATE PURCHASING SPECIFICATION

AA22816

Rev No.02

PREFACE SHEET

## POLYTETRA FLUORO ETHYLENE (PTFE) FILM & TAPE

FOR INTERNAL USE ONLY

REMOVE THIS PREFACE BEFORE ISSUE TO SUPPLIERS

### Equivalent/Comparable Standards:

- BRITISH : BS EN ISO 13000 – 1:1998 & 13000 – 2:1998

### Suggested / Probable suppliers and grades:

Refer plant vendors list

### User Plants and Replaced Plant Specifications/References:

- HEEP, HARIDWAR : 0503.410 PTFE – F – 2.

Revisions:  
As per Clause No.40.4 of MOM of MRC – E&IM

**APPROVED:**  
INTERPLANT MATERIAL RATIONALISATION  
COMMITTEE – MRC(E&IM)

Rev No.02	Amd No.	Reaffirmed	Prepared	Issued	Dt. of 1 <sup>st</sup> Issue
Dt:27-11-2014	Dt:	Year:	HEP, Bhopal	Corp.R&D	April, 1979

**This page intentionally left blank**



# CORPORATE PURCHASING SPECIFICATION

AA22816

Rev No. 02

PAGE 1 of 3

## POLYTETRA FLUORO ETHYLENE (PTFE) FILM & TAPE

### 1.0 GENERAL:

This specification governs the quality of unfilled Poly tetra fluoro ethylene sintered tape.

### 2.0 APPLICATION:

Used as technological release film.

### 3.0 COMPLIANCE WITH NATIONAL STANDARDS:

There is no Indian Standards covering this type of material. However assistance has been drawn from BS EN ISO 13000 – 1:1998 & 13000 – 2:1998.

### 4.0 DIMENSIONS AND TOLERANCES:

#### 4.1 Preferred Thickness:

0.03 mm & 0.08 mm

#### 4.2 Tolerance on Thickness:

± 0.01 mm for 0.03 mm and ± 0.005 mm for 0.08 mm

#### 4.3 Width:

25, 30, 32, 40 & 300 mm. Other widths may also be ordered.

#### 4.4 Tolerance on width:

±1.0 mm for 300 mm width

±0.5 mm for 25, 30, 32 & 40 mm width.

### 5.0 TEST METHODS:

Unless otherwise specified, the material shall be tested in accordance with the relevant method of BS EN ISO 13000 – 1 & 13000 – 2

### 6.0 FINISH:

The tape shall contain no filler or additives. The tape shall be white, reasonably flat and free from surface defects, inclusions, voids and cracks.

### 7.0 SAMPLING:

A separate sample shall be taken to represent each batch of product and shall be of sufficient size to enable the required test pieces to be prepared from it.

Revisions: As per Clause No.40.4 of MOM of MRC – E&IM		
--	--	--

<b>APPROVED:</b> INTERPLANT MATERIAL RATIONALISATION COMMITTEE – MRC(E&IM)		
--	--	--

Rev No.02	Amd No.	Reaffirmed	Prepared	Issued	Dt. of 1 <sup>st</sup> Issue
Dt:27-11-2014	Dt:	Year:	HEP, Bhopal	Corp.R&D	April, 1979

COPYRIGHT AND CONFIDENTIAL  
The Information on this document is the property of BHARAT HEAVY ELECTRICALS LIMITED.  
It must not be used directly or indirectly in any way detrimental to the Interest of the company.

# CORPORATE PURCHASING SPECIFICATION



## 8.0 PHYSICAL PROPERTIES:

### 8.1 Density at Room Temperature:

2.13 – 2.23 gm/cm<sup>2</sup>.

## 9.0 MECHANICAL PROPERTIES:

### 9.1 Tensile Strength:

In longitudinal direction: 20 N/mm<sup>2</sup>, min

### 9.2 Elongation at break:

160% min

### 9.3 Presence of Pin Holes:

No pin holes shall be visible when tape is elongated by 50%.

## 10.0 THERMAL PROPERTIES:

### 10.1 Resistance to Heat:

The material shall show no signs of melting and the loss in mass shall not exceed 0.5% when subjected to 300 ± 5°C for 24 ± 1 hour.

## 11.0 ELECTRICAL PROPERTIES:

### 11.1 Electric strength:

BDV in kV using 6 mm dia. electrodes.

Average value : 2.0 kV min.

Individual value : 1.5 kV min

Testing shall be done on 25 points.

## 12.0 CHEMICAL PROPERTIES:

### 12.1 Identification of Material:

The material shall be PTFE when identified by Infra-Red Spectrophotometer or any other conventional method

## 13.0 INFORMATION WITH QUOTATION:

Supplier shall furnish clause by clause comments, clearly bringing our deviations from this specification, if any, along with the quotation.

## 14.0 TEST CERTIFICATES:

Unless otherwise specified, three copies of test certificates shall be supplied along with each consignment.

In addition, the supplier shall ensure to enclose one copy of the test certificate along with their despatch documents to facilitate quick clearance of the material.

The test certificate shall bear the following information:

AA22816 (Rev. No 02): POLYTETRA FLUORO ETHYLENE (PTFE) FILM & TAPE

BHEL order No.

Batch/Lot No.



# CORPORATE PURCHASING SPECIFICATION

AA22816

Rev No.02

PAGE 3 of 3

Test results obtained for Physical, Mechanical, Thermal & Electrical properties and dimensional tolerances as per the specification.

## 15.0 PACKING AND MARKING:

The tape shall be supplied in rolls wound on paper board bobbins of size with both sides well protected. Each roll shall contain approximate 50 metres length of tape and shall not contain any joints. The rolls shall be suitably packed in wooden boxes so as to prevent damage in transit and storage.

Each box shall be labelled with the following.

AA22816 : POLYTETRA FLUORO ETHYLENE (PTFE) FILM & TAPE

BHEL order No.

Manufacturer's / Supplier's Name

Batch/Lot No.

Nominal Thickness, Width & Length

Net weight.

## 16.0 REFERRED STANDARDS (Latest Publications Including Amendments):

Nil.