

# **DIRECTA**

## **ESSENTIALS FOR INDUSTRY**

Tel: 01621 828882

[www.directa.co.uk](http://www.directa.co.uk)

**TECHNICAL DATA SHEET**

**PRODUCT:** PTFE GT Tape

Our Ref: 031

**DESCRIPTION:**

Permanite GT Tape Supplied as standard 5M x 12mm x 0.2mm in spool format.

**TECHNICAL DETAILS:**

Only one wrap is required for taper/taper and taper/parallel combinations in diameter range 3mm to 50mm (1/8 in to 2 in). Apply tape directly to male thread, starting away from and working towards the pipe end, with tape conforms to thread contours. For pipeline threaded connections over 50mm (2 in) multiple wrapping is recommended.

Permanite GT Tape is recommended for sealing BS21 threads to the standards set for BS6974:1991 Type C Materials and satisfies BGC IM/16. It is also suitable for use of oxygen.

**Standard Performance Ratings**

Test Methods	Fittings	Pass Level
BS 6974 Appendices LNP	As BS6974	Type C
BS 6974	3mm, 12mm, 25mm steel (1/8 in, 1/2 in, 1 in) Taper/Taper & Taper/Parallel	Type C
As BS 6974 Joints wrenched to locking	50mm, (2 in) Steel Taper/ 5 Bar Taper & Taper/Parallel 75 lbf/in2	
BS 6974 Appendix C Lubricant Content		0.1%

Except where indicated otherwise, the above figures are average values and should not be regarded as maximum values for specification purposes. The company reserve the right to improve products and change specifications, which may alter the performance. We advise the customer to test the material required to ensure the suitability of intended application.

**Recommended Maximum Working Pressures**

Pipe Size	Medium Water			
	Gas	20°	100°	Steam
13mm (1/2 in)	20 Bar (300 lbf/in2)	30 Bar (450 lbf/in2)	3.5 Bar* (52 lbf/in2)	2 Bar* (30 lbf/in2)
25mm (1 in)	10 Bar (150 lbf/in2)	20 Bar (300 lbf/in2)	3.5 Bar* (52 lbf/in2)	2 Bar* (30 lbf/in2)
50mm (2 in)	5 Bar (75 lbf/in2)	15 Bar (225 lbf/in2)	2 Bar* (30 lbf/in2)	2 Bar* (30 lbf/in2)

## HEALTH AND SAFETY

### HEALTH HAZARD DATA:

#### PRIMARY ROUTES OF POTENTIAL EXPOSURE

Inhalation: The health risk from PTFE relates to the possible inhalation of decomposition products. At temperatures in excess of 260°C the polymer will progressively decompose and give rise to a number of gases including tetrafluoroethylene (from 430°C), hexafluoropropylene (from 440°C) and perfluoroisobutylene (from 475°C). In some manufacturing operations involving extended exposure at 400°C, carbonyl fluoride is known to be the main decomposition product, which, in the presence of moist air is rapidly converted to the highly corrosive hydrogen fluoride. A complex particulate substance is also known to be formed from the decomposition of PTFE at temperatures above 350°C, which is thought to be the cause, if inhaled, of the development of a characteristic syndrome with influenza-type features (fume fever). The latter usually manifests itself within a few hours of exposure but the characteristics usually subside within 48 hours with no after effects. Some of the products from higher temperature decompositions of PTFE (e.g. perfluoroisobutylene) are highly toxic.

Skin Contact: No skin problems should arise from the handling of the Directa PTFE containing products referred to above, but good occupational hygiene practices should be observed when such materials are being handled. The possible contamination of tobacco with PTFE should be avoided, as smoking is then a possible cause of the fume fever referred to above.

This information is based on current knowledge and experience. Its purpose is to describe our tapes in terms of Health and Safety requirements and should not be treated as specification.

DS087.TDS

17<sup>th</sup> March 1999