



TTP Continuous Polyester for decals

Technical Datasheet

TTDS-031 Revision 6 - May 2016

TTP is a continuous format Polyester material with a permanent acrylic adhesive designed for high durability label applications.

TTP is suitable for thermal transfer printing to create decals, nameplates, banners and logos.

The product is available in several colours with white (WP), clear (CP) and metalized silver (MP) as standard. Typical industry use includes aerospace, defence, electronics and infrastructure. Print performance and durability can only be guaranteed when printed using TE Connectivity printers ribbons and software, as shown in TE Connectivity Printer Ribbon Matrix 411-121005.

TTP labels are available as part of a complete identification system. The system comprises specific printers, thermal transfer ribbons and WINTOTAL and Print Easy software.

TTP DECAL MATERIAL

Features

- Available in continuous format
- Standard colours are clear, white and metalized silver
- Other colours available on request
- Interior and exterior aircraft use including flight entertainment and deck instrumentation

Temperature Rating

- Operating Temperature Range
–40°C to 150°C (-40°F to 302°F)
- Minimum Application Temperature 10°C (50°F)

Specifications / Approvals

Industry	WP White Polyester - UL MH17292 Group PGJ12 (WP1) UL MH17292 Group PGJ18 (WP1) MP Metalized Polyester - UL MH17292 Group PGJ12 (MP1) UL MH17292 Group PGJ18 (MP1)
Military Specification	Meets the requirements of MIL-AA-59485, test method MIL-P-38477A

Applications

- Bar coding
- Graphics
- Industrial and Commercial applications
- Aerospace & Defence Applications

Design for Environment

- Does not contain any declarable or prohibited substances from the UNIFE Railway Industry Substances List
- Further information and a downloadable declaration covering RoHS and REACH compliance can be found at the TE Product Compliance Support Centre:

<http://www.te.com/usa-en/utilities/product-compliance.html>

Shelf Life

2 years when following good commercial storage practice detailed below

Storage

Product should be stored in the original packaging, with any plastic covers which were included during shipping. Store out of direct sunlight in a clean, dry, dust free, environment. Product should not be stored outside of the designed storage temperature, which is -10°C (14°F) to +40°C (104°F).



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Technical Performance

	Requirement / Method	Result
Print Permanence		
Marking Adherence	SAE AS 5942, 20 rubs	Pass
Resistance to Solvents	TE test method 109-121012	Pass
Resistance to TE industrial fluids		
• Isopropyl alcohol	24 hours immersion at 23°C followed by mark adherence	Pass
• IRM 902	Requirement for all fluids legible	Pass
• MIL PRF 23699	minimum print contrast score C3*, legible.	Pass
• Skydrol LD4		Pass
• MIL-H-83282		Pass
• Diesel Fuel		Pass
• Kilfrost DF plus		Pass
• Tap water		Pass
• 5% Salt solution		Pass
• Detergent (1% Teepol)	*Print contrast as defined in TE doc.411-121002	Pass
Adhesion to substrate		
• Stainless steel	FTM 1 (180°) 72 hour dwell at 23°C +/- 2°C, 50% RH +/- 5% RH	Typical adhesion 19 N/25 mm (69.4 oz/in) Pass
• Glass		19 N/25 mm (69.7 oz/in) Pass
• Aluminium		13 N/25 mm (45.7 oz/in) Pass
• Polypropylene		12 N/25 mm (44.6 oz/in) Pass
• Epoxy Painted Surface		21 N/25 mm (75.5 oz/in) Pass

Typical Label Thickness Details

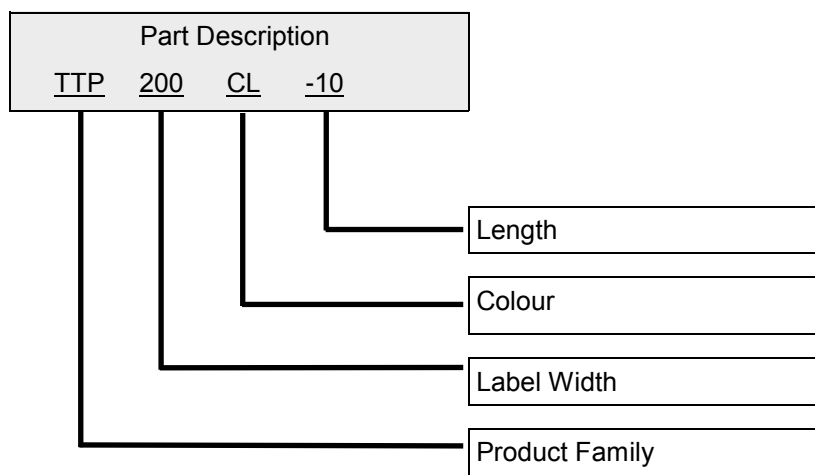
- Facestock: 0.05 mm / 0.0020 inch
- Adhesive: 0.022 mm / 0.0087 inch
- Liner: 0.056 mm / 0.0022 inch

Solder Immersion (tested for WP and MP)

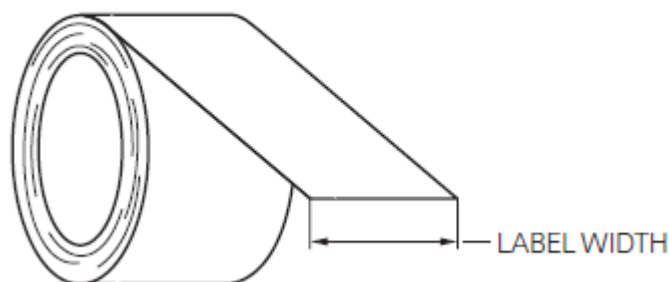
After 10-second immersion at 250°C (480°F) in molten (lead free) solder: slight yellowing and print remains legible

Where possible, TE have tested product as a finished item, including the print. Operational tests are followed by an assessment of mark adherence to validate fit form and function.

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Ordering Information



Available sizes and formats

Ordering description	Label Width (mm) (inches)		Roll length (meters) (feet)		Quantity per pack
TTP200<colour>-10	50.8	2.000	30.5	100	continuous
TTP300<colour>-10	76.2	3.000	30.5	100	continuous
TTP400<colour>-10	101.6	4.000	30.5	100	continuous
TTP600<colour>-10	152.4	6.000	30.5	100	continuous

Options

Colours	Standard	Clear	White	Metalized silver	
	Code	CL	WE	MP	

Other colours available upon request

Ordering example: TTP400WE-10

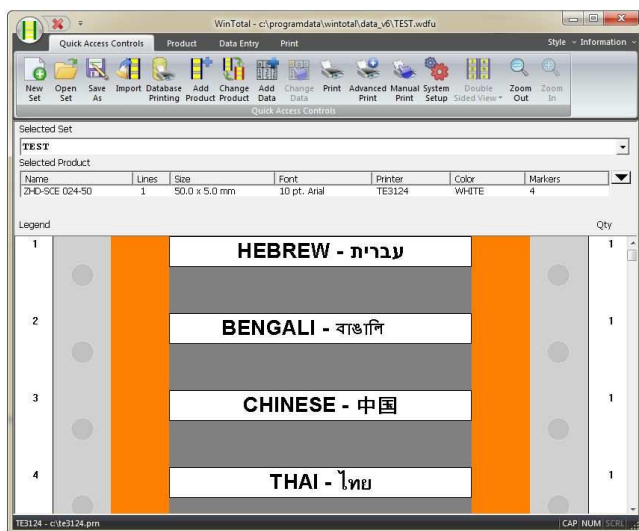


Printer Information

Print quality and print performance can only be guaranteed when specific TE printer and ribbons are used.

The current list of printers and ribbons can be found in TE document 411-121005 'Identification Printer Product Ribbon Matrix'. This document can be found in 'Access Our Tools':

<http://www.te.com/usa-en/utilities/access-product-tools->



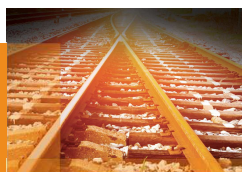
Software

WINTOTAL software, available to download for a 14 day evaluation period from the Identification Printer Software page:

<http://www.te.com/usa-en/products/identification-labeling/printers-software/printing-software.html?tab=pgp-story>

Print Easy software also available

Contact a TE representative for further information



www.te.com/rail

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