***Technical Data Sheet***
***Draft version ; edition 1***
***Date: 02-08-02***

# *Letratag Metallic tape*

The tape is supplied in a cassette and used with the LT machine. Each tape is 12mm wide and 4m long, available in silver and green. This tape is not recommended for outdoors usage as it is not resistant to water.

| Property | Unit | Value | Test method |
|---|---|---|---|
| **1. General** | | | |
| - Thickness tape | Micron | 170 ± 17 | Micrometer |
| - Thickness liner | Micron | 90 ± 9 | |
| **2. Adhesive properties** | | **Dwell** | |
| | | **20 min** **24 hrs** | |
| - to stainless steel | N/25mm | 17 20 | PSTC-1 |
| - to glass | | 17 20 | |
| - to PVC | | 21 22 | |
| - to textured ABS | | 10 9 | |
| - to powder coated steel | | 8 14 | |
| - to wood | | 5 10 | |
| - to polypropylene film matt | | 1 2 | |
| - to polypropylene film glossy | | 2 3 | |
| - to polyethylene | | 6 7 | |
| - to Lever Arch File | | 3 5 | |
| - to steel computer casing | | 3 6 | |
| - shear | Minutes | **Dwell 10 minutes** 1440 | Sheartester 12mmx12mm |

*Dwell denotes the contact time between label and surface*

| | | | |
|---|---|---|---|
| 3. **Chemical resistance of text printed in embossing tool** | | | |
| - Eurosuper | 30x | No visible effect | Crockmeter, |
| - Diesel | 30x | No visible effect | 900g |
| - Isopropylalcohol | 30x | No visible effect | weight/arm |
| - Ethanol | 30x | No visible effect | |
| - Ethyl acetate | 30x | Printing gone | |
| - Skydrol* LD-4 (hydraulic engine oil) | 30x | No visible effect | |
| - Sabesto** automotive brake fluid cleaner | 30x | No visible effect | |
| - Exxsol D40*** naptha | 30x | No visible effect | |
| - ULS 200**** cleaning solvent | 30x | No visible effect | |
| - Water | 30x | No visible effect | |
| **Abrasion resistance of text Printed in embossing tool** | | | |
| - Pencil erasure | 30x | No visible effect | |
| - Polystyrene pin | 30x | No visible effect | |
| - Sandpaper | 30x | Moderate print removal | |
| **4. light stability of label inside** | | | |
| - real life test of 1year | | No visible effect on text and background when tested indoors | |
| **5. Temperature stability** | | | |
| - Application temperature | °C | Room temperature | |
| - Service temperature | | -20° to 80°C | |
| 30 days in consumer freezer | | No visible effect | |
| 24hrs at 100°C, no R.H.<br>24hrs at 90°C, 90% R.H. | | No visible effect<br>Black oxidation is observed | |
| **6. Weatherability in QUV** | | | |
| **-** 30 days at 60°C (on alu panel) | | Not resistant, oxidation is observed<br><br>Not suited for contact with water, salt water or fertilizers | |

*Dwell denotes the contact time between label and surface*

| | | | |
|---|---|---|---|
| **7. Shelf life of cassette**<br><br>- 1 year at 5-25°C and 40-80% relative humidity in its original packaging | | | |

***Skydrol is a registred trademark from Solutia, ** Sabesto is a registred trademark from Wurth***
****Exxsol is a registred trademark from Exxon, ****ULS is a registred trademark from Electrolube***

Scratch & Solvent resistance : The printed labels are subjected to different scratching sources and chemicals for a fixed number of cycles with a finger weight of 900g.

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