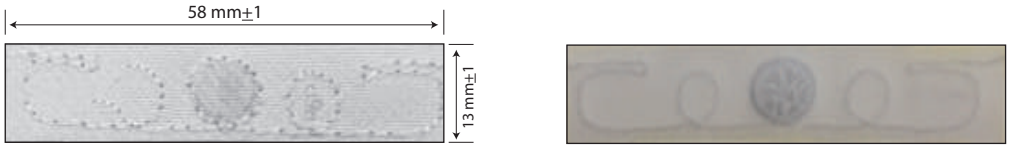
SMART RFID LABELS
Lavanda 1358



Lavanda 1358 is a new SLIM Woven label for Flat Linen, Garment, Pillow case etc. The tag has been specifically designed to meet the tracking requirements of the laundry industry in terms of shape, robustness and ease of fixation.

Lavanda 1358 is based on a unique and patented concept. It uses a very small UHF device coupled to a sewed secondary antenna made of an innovative and flexible special thread. The tag is easily affixed onto textile products using a standard sewing machine with a specific trace, or on the 2 edges or inserted into the hem of textile items. Specifically designed for flat linen to be as slim as possible to continue having a good compromise in term of RF performance and physical dimension.

TYPICAL APPLICATIONS

Laundry applications including

- Linen
- Towels
- Uniforms
- Re-usable bags

PHYSICAL SPECIFICATION	
Face Stock	Polyester / Polycotton
Label Sizes	58mm (±1) x 13mm (±1) Thickness: Overall < 0.5mm, Chip Area < 2.5mm
Adhesive	Specific proprietary Polyurethane. Transparent to slightly yellowish after patching.
Weight	0.55 g
Delivery format	Single Pieces
No. of Labels/ Reel	500 pcs per bag

RF SPECIFICATION

Mode of Operation	Passive
Device type	Class 1 Gen 2 Passive UHF RFID transponder
Air interface protocol	UHF Gen 2 – ISO18000-6C
Operational frequency	Global 860-960 MHz
IC type*	Impinj Monza R6P
Memory configuration	EPC Size of 96 - 128 Bits, 96 bits TID with 48 bits Unique serial number
Data Retention	Upto 50 years
Write cycle endurance	100,000
Read range (2W ERP)**	Upto 6 m
Applicable Surface Materials	Non-metallic surfaces

ENVIRONMENTAL RESISTANCE

Operating Temperature	Patching: 220°C (399°F), 20 seconds for 1 cycle Washing: 90°C (194°F), 15 minutes for 200 cycles Drying: 180°C (356°F), 3 minutes for 200 cycles Tunnel Finisher: 170°C (338°F), 10 minutes Autoclave: 3.2bar, RH 85%, 5min @ 134°C (273°F)
Peak Temperature	220°C / 399°F
Adhesive Service Temperature	220°C / 399°F
Recommended Application Temperature	Standard: +10°C to +38°C / 50°F to +100.4°F Thermopatching: 204°C/12s/5bars, or 210°C/10s/5bars.
Water Resistance	IP68
Chemical Resistance	Resistant to all common chemicals in the washing process
Ideal Storage Condition	-40°C to +120°C / 50% RH
Expected Lifetime	200 wash cycles or 3 years from shipping date (whichever comes first)

PRODUCT INSTALLATION

- The standard version of the tag can be sewed along the edge of the item or inserted in the hem or a pouch only.
- The tag withstands heat-sealing processes and can be attached to the textile article using its own adhesive delivered as a standard (heat-sealing and/or sewing version)
- Heat sealing should be performed on clean and dry items.
- Barrier textiles need extra attention (very thin layer on top of textile which could decrease patching adhesion).
- Due to the nature of the textiles i.e. developed to prevent matter from passing through it, patching the transponder can be an issue. In this case, an extra cycle with pre-heating the barrier textile for 7 to 10 seconds can amend any adhesion issues. Position the transponder patch immediately after pre-heating and seal it into place.
- The final adhesion also depends on your material. (Please validate your parameters with your own machine and material before using)

PERSONALIZATION OPTIONS

Pre-encoding

- Customer specific encoding of EPC
- Data Matrix printed & encoded into the chip

Customized Printing

- Printing of Customer artwork on Tag (Color)

ORDER INFORMATION

Packet Sizes

- 500 Labels per bag

* Other IC's available on request
** The indicated read range values are measured in our laboratory testing environment, where antennas with optimum directivity are used with maximum allowed operating power.Different surface materials and environments may exhibit different results.
SIVA reserves the right to change its product and services at any time without notice. As our products are used in circumstances beyond our control, we cannot be held liable for any damage caused through their use. This product specification replaces earlier versions.

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