



Thermal TC 42 Upp

Removable

White thermal paper with protective top and bottom coat (standard top quality)

Specifications

Grammage	approx. 76	g/m ²	ISO 536
Caliper	approx. 80	µm	ISO 534
Tensile strength MD	approx. 80	N/15mm	DIN 53112
Tensile strength CD	approx. 45	N/15mm	DIN 53112
Stiffness MD	approx. 230	mN	DIN 53121
Stiffness CD	approx. 140	mN	DIN 53121
Opacity	approx. 86	%	ISO 2471
Imaging colour	black		
Raw material	1911004		

Application & use

The surface of Thermal TC 42 Upp offers an excellent quality of the imprint with all traditional printing methods. In general, suitability of all printing inks should be tested prior to printing. Web temperature during curing should not exceed 50° C in order to prevent an early reaction of the thermal reactive ink. Printing speeds of up to 200 mm/s are possible in thermal direct printing.

Thermal TC 42 Upp is Bisphenol-free and can be used wherever thermal reactive labels of smudge proof, solvent and grease resistant paper are required, e.g. for weight labels (meat packers, supermarkets) or for price marking labels (excellent presentation of EAN and UPC codes). Applications on surfaces containing plasticizers are only partially possible. By reason that intensive contact with plasticizers might reduce the sensitivity of the thermal reactive coating and might cause a fading of the printed image, for applications on soft PVC films individual tests are recommended.

Regulations concerning contact with food

The thermal paper grade of Thermal TC 42 Upp (Grade 923) according to the sample material is physiologically and toxicologically safe and may therefore be used in printers and scales for the marking of goods. However, it may only have direct contact to foodstuffs which are washed and/or peeled before consumption (ISEGA Research and Development Institute, Aschaffenburg).

Adhesive

Removable, acrylic-based adhesive.

Specifications

Tack	medium
Peel adhesion	low (removable)
Shear	low
Min. application temp.	0° C
Service temperature	-20° C to + 50° C (up to 200° C for short periods – hot fusing)

Application & use

The adhesive is a microsphere based adhesive. Suitable for applications requiring medium tack combined with excellent removability. It is particularly suited for labelling smooth objects like books, glass or metals. However, the adhesion is suboptimal on rough or extremely curved surfaces. It is unplasticized and features good resistance to light, temperature and ageing. Face material, shape of the label, service conditions and contact time may have an impact on removability profile. Tests of the printed label under actual application conditions are strongly recommended.

Processing

Excellent die-cutting characteristics on all customary machines.

PH (515)

Honey, supercalandered glassine.

Specifications

Grammage	approx. 57	g/m ²	ISO 536
Caliper	approx. 50	µm	ISO 534
Tensile strength MD	approx. 78	N/15mm	DIN 53112
Tensile strength CD	approx. 35	N/15mm	DIN 53112
Transparency	approx. 50	%	DIN 53147

Application & use

The supercalandered glassine is perfectly suited for assignment in labelling machines equipped with optical or mechanical scanners.

Processing

As part of a self-adhesive compound PH (515) offers excellent die-cutting characteristics with all customary flatbed and rotary die-cutting tools.

Storage conditions & shelf life

12 months from date of manufacture – storing at a temperature of $20 \pm 5^\circ \text{C}$, a relative humidity of $45 \pm 5 \%$ and a dark storage is recommended. Moisture, heat and direct sunlight have to be avoided.

If the storage conditions and the conditions at the place of converting are different, the material should have enough time for acclimatisation. Otherwise this might lead to converting problems. Generally the material should be unpacked just before converting.

Self-adhesive materials should be converted systematically based on the principle “first-in-first-out”. Also the shelf-life should be taken into account.

Regulations concerning Contact with food

The paper complies with recommendation BfR XXXVI.

Subject to change without notice



Carl Valentin GmbH
Neckarstraße 78 – 86 u. 94
78056 Villingen-Schwenningen
Phone + 49 7720 9712 - 0 . Fax + 49 7720 9712 – 9901
info@carl-valentin.de www.carl-valentin.de

