



What Are Direct Thermal Printable Labels?

From long-lasting legal contracts to one-time use receipts, businesses worldwide use printing in one form or the other. While the results are the same—converting an image from digital to physical, the processes vary.

One of the widely popular printing processes is thermal printing, which uses direct thermal printable labels to get quality images at extraordinary speed. The thermal printing market is growing at the rate of millions and will continue to do so, which begs the question of how good these [direct thermal printable labels](#) are.

Direct Thermal Printable Labels

These are cost-effective labels made by keeping thermal printing in mind. Unlike the classic inkjet printers that use ink to produce an image, thermal printers use heating elements in it to transfer or activate the material on the labels.

Talking about the label, it has a base coated with a heat-activated substance that reacts with the printer to give out the desired image. Most of them have an added layer of protective coating to further safeguard them from cuts, rubs and other environmental factors.

These, however, should not be confused with thermal transfer labels that work on a similar concept. Thermal transfer labels use special printers and have a ribbon roll, which when heated, melts and transfers onto the label to produce the image.

Let us now go over a few advantages, disadvantages & common applications of direct thermal printable labels.

Advantages

Ease of Use

Direct thermal labels are straightforward to use as there are no additional steps and processes. All one needs to do to get high-quality images is place the label into the direct thermal printer and print.

High-quality images

The heat from the printhead activates the label in specific parts, making the resulting print accurate & of high quality. Moreover, it can print huge amounts in a relatively short time.

Reduced Inventory

These labels don't need ink, toners or ribbons to print which helps reduce inventory and save storage space. The printers used for direct thermal printing are also smaller as compared to others because of the absence of extra parts.

Saves Time

The thermal printing process runs at a fast pace without the need to monitor or reload the ribbons in the printer. This saves time in the long run.

Cost-effective

The reduced inventory also helps reduce the cost of storing them. In the printing aspect, the absence of parts like ink cartridges and toners helps the business save on purchase and maintenance.

Disadvantages

Vulnerable Labels

The labels produced by this are vulnerable and can only be used in short-term applications. When exposed to harsh environmental conditions or heavy contact, the images on the labels could fade.

Plain Images

The heat-activated direct thermal labels print predominantly in black & white and cannot print colourful images.

Applications

High-speed accurate printing finds its applications in a variety of industries. Here are a few uses to name:

- Used to print food labels for packed food
- Used in retail stores for price marking
- Used to print courier & logistics labels
- Used to print error-free barcodes
- Used to print single/short-time use tags

The low durability is often a deal-breaker for businesses that want to switch to direct thermal printing labels. That's where Cosmo Films comes in.

Our range of BOPP-based Direct Thermal Printable (DTP) label films has excellent rub, water, oil & solvent resistance besides all the advantages mentioned above. It is also suitable to print with UV & water-based flexo.

[Contact us](#) to get in touch with our experts and know more.