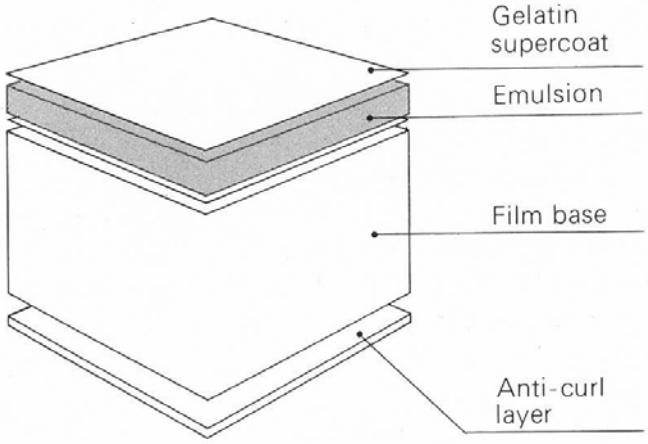
Everything you need to know about …

Film

1. Film is made up of many layers. (See below)
2. The 35mm referred to is the width of the whole film, not just the image size
3. Film speed is rated in ISO (International Standards Organization) numbers, some common speeds are ISO 100 and ISO 400. ASA (American Standards Association) film speeds are interchangeable with ISO numbers, and both are often quoted.
4. As film speed increases, so too does the size of the silver halide crystals that are affected by light.
5. As silver halide crystal size increases, the time needed for proper exposure decreases. This comes at a cost however, as the faster a film is, the grainier the print is.
6. ISO numbers range from ISO 25 to about ISO 3200. If you half the film speed, you require twice as much light for a proper exposure, and vice versa.
7. Film is sold prepackaged in 12, 24, 27, and 36 exposure rolls.
8. Store film in a cool, dry place. Your fridge is excellent.
9. "Slow" film refers to film under ISO 64, "medium" speed film is around ISO 100, and fast film is anything ISO 400 or above.

Black and white film structure



A clear gelatin top coat helps to protect the sensitive emulsion from abrasion. Light-sensitive silver halides in the emulsion layer are either fine and thinly coated (slow film) or are relatively coarse and thickly coated (fast film). The emulsion layer is supported by a plastic, or triacetate, base. Beneath it, another gelatin layer inhibits curling and contains a gray antihalation dye that prevents any light reflecting back into the upper layers.

In black-and-white photographic film there is usually one layer of silver salts (halides). When the exposed grains are developed, the silver salts are converted to metallic silver, which block light and appear as the black part of the film *negative*.