

Notes on photography

"-chrome" as a suffix: indicates film for slides

"-color" as a suffix indicates film for color prints

Ektachrome films can be developed in 1 hour

Kodachrome films require specialized processing that can take several days

Ektar is a new line of Kodak print films that have ultra fine grain

HC = high contrast film

PRO = professional film

T = tungsten film, adjusted for correct color under artificial light

T-MAX is Kodak's high-resolution black and white film that replaced Panatomic-X film

Exposure compensation: Dark objects in a light field or visa versa will throw the light meter off, so exposure time must be adjusted to compesate:

SPECIMEN CONDITION	EXPOSURE COMPENSATION
Dark objects scattered thinly in a bright field	0.5
Objects spread evenly throughout the field	1
Objects spread in dark field	2
Objects scattered thinly in dark field	4

ISO/ASA: The speed of the film, which is a function of the number of grains in the emulsion, the faster the film (the higher the ISO/ASA), the less grains in the emulsion, so less light is required for the exposure. This results in "grainy" pictures. For photomicrography, use the slowest film possible.

Reciprocity: "The emulsion generally used in photography at present is subject to the reciprocity law, according to which principle the density of the image formed when the emulsion is developed is directly proportional to the product of the exposure time and the light intensity. However, the principle does not apply to long exposures, but may result in under-exposures and color casts, which is called 'reciprocity law failure'. In photomicroscopy, this phenomenon is compensated by

adjustment of exposure time". Olympus photomicrography manual.

Black & White 35mm films

Brand	Film Type	ISO/ASA	Reciprocity
Kodak	Plus-X Pan	125	2
	Plus-X Pro	125	5
	Technical Pan	(100)	1
	T-MAX 100	100	5
	T-MAX 400	400	6
	T-MAX 3200	3200	2
	Tri-X Pan	400	3
	Tri-X Pro	320	5
Agfa	Agfa pan 25 Pro	25	4
	Agfa pan 100 Pro	100	4
	Agfa pan 400 Pro	400	7
Ilford	PanF	50	4
	FP4	125	2
	HP5	400	7
	XP2-400	400	5
Fuji	Minicopy HR-II	(40)	1
	Neopan F	32	2
	Neopan SS	100	4
	Neopan 400 PRESTO	400	6
	Neopan 1660super PRESTO	1600	7
	Neopan ID	80(D)64(T)	1
	A-1	12(T)	4

Color 35 mm films

Brand	Film Type	ISO/ASA	Reciprocity
Kodak	Ektachrome 50HC	50	4
	Ektachrome 64	64	3
	Ektachrome 100HC	100	4
	Ektachrome 100	100	4
	Ektachrome 100PLUS	100	5
	Ektachrome 200	200	5
	Ektachrome 200PRO	200	5
	Ektachrome 400	400	6
	Ektachrome 50 T	50	2
	Ektachrome 160 T	160	4
	Ektachrome 160PRO	160	4
	Ektachrome P800/1600	800/1600	6
	Kodachrome 25	25	4
	Kodachrome 25PRO	25	4
	Kodachrome 64	64	4
	Kodachrome 64PRO	64	4
	Kodachrome 200	200	4
	Kodachrome 200PRO	200	5
	Kodachrome 40T	40	4
	Ektar 25	25	1
	Ektar 25PRO	25	1
	Ektar 100	100	1
	Ektar 1000	1000	6
Kodak	Kodacolor GOLD 100	100	6

Brand	Film Type	ISO/ASA	Reciprocity
	Kodacolor GOLD 200	200	6
	Kodacolor GOLD 400	400	2
	Kodacolor GOLD 1600	1600	4
Agfa	Agfachrome 50RS	50	6
	Agfachrome 100RS	100	6
	Agfachrome 200RS	200	7
	Agfachrome 1000RS	1000	6
	Agfachrome CT100	100	5
	Agfacolor XRS100	100	6
	Agfacolor XRS400	400	6
	Agfacolor XRS1000	1000	7
Polaroid	Polachrome CS35mm	40	4
	Polachrome HCP35mm	140	7
Fuji	Fuji chrome Velvia	50	2
	Fuji chrome 100	100	2
	Fuji chrome 64T	64	2
	Fuji chrome 50D	50	2
	Fuji chrome 100D	100	3
	Fuji chrome 400D	400	3
	Fuji chrome P1600D	1600	4
	Fuji color REALA	100	2
	Fuji color SUPER HG100	100	1
	Fuji color SUPER HG200	200	2
	Fuji color SUPERHG400	400	2
	Fuji color SUPERHG1600	1600	4