Photochemical Selection Guide

This guide lists the Mykrolis photochemical filters and their compatibility with the most common photochemical solvents at room temperature (20 to 25 C).
This information is based on technical publications, laboratory experiments, data from materials suppliers and field tests. Actual performance may differ as a result of variations in temperature, concentration, exposure time or other factors.

SOLVENTS	Boiling Point (deg. F)	Flash Point (deg. F)	Flammable	Viscosity (cp) at 20C	Density (g/ml)	Surface Tension (dynes/cm)	CAS NUMBER	CARTRIDGE FILTERS: Wafergard F	Optimizer PR 16/40	Panelgard PDP-40	PI-250	Optimizer DEV	Optimizer DI	DISPOSABLE FILTERS: Wafergard F	Optimizer D PR and PR-L	IMPACT 2 and IMPACT Plus	IMPACT SR LHVD	Panelgard 1-2-3	Panelgard PDP and Panelgard PDP 1-2-3	Optimizer DEV and Optimizer ST DEV	Optimizer DI and Optimizer ST DI	Fluoroline-S and Fluoroline P1000	Fluorex-S	Fluorex-CN	Processgard Inline Filter	O-RINGS: Teflon Encapsulated Viton	EPR	Kalrez
Acetone	133	1	Yes	0.32	0.79	23	67-64-1	●	♦	♦	♦	F	F	F	F	F	F	F	F	F	F	F	F	F	F	●	♦	●
Adamantane (tricyclodecane)	286						281-23-2	●																				●
n-Amyl Acetate	149	75	Yes		0.88	12	628-63-7	●	♦	♦	♦	F	F	F	F	F	F	F	F	F	F	F	F	F	F		♦	●
Anisole (Methyl phenyl ether, Methoxybenzene)	158	109	No		1.00	34	100-66-3	●	●	●	●	♦	♦	●	●	●	●	●	●	♦	♦	●	●	●	●	●	●	●
Aquatar						20		●	●	●	●	♦	●	●	●	●	●	●	●	♦	●	●	●	♦	●				
Aquatar III						22		●	●	●	●	♦	●	●	●	●	●	●	●	♦	●	●	●	♦	●				
Aquatar VI						23		●	●	●	●	♦	●	●	●	●	●	●	●	♦	●	●	●	♦	●				
2-Butoxyethanol (ethylene glycol monobutyl ether, butyl Cellosolve)	171	140	No		0.90	26	111-76-2	●	♦	♦	♦	♦	♦	●	♦	♦	●	♦	♦	♦	♦	●	●	♦	●		♦	●
n-Butyl Acetate	259	76	Yes	0.73	0.88	28	123-86-4	●	♦	♦	♦	F	F	F	F	F	F	F	F	F	F	F	F	F	F	●	♦	●
Butyl Alcohol	243	84	Yes		0.81	27	71-36-3	●	●	●	●	F	F	F	F	F	F	F	F	F	F	F	F	F	F	●	●	●
Butyl cyclohexane	179	106	No		0.82		1678-93-9	●	○	○	○	○	○	●	○	○	●	○	○	○	○	●	○	○	●		○	●
Butyl ether (Dibutyl ether)	286	77	Yes		0.76		142-96-1	●	♦	♦	♦	F	F	F	F	F	F	F	F	F	F	F	F	F	F		♦	●
Cyclopentanone	266	87	Yes		0.95		120-92-3	●	♦	♦	♦	F	F	F	F	F	F	F	F	F	F	F	F	F	F		●	●
Cyclohexanone	313	111	No	2.13	0.95	35	108-94-1	●	♦	♦	♦	♦	♦	●	♦	♦	●	♦	○	♦	♦	●	○	○	●		♦	●
Developer (Positive, 0.26N TMAH)			No	1	1.00			●	●	●	●	●	○	●	●	●	●	●	●	●	○	●	●	●	●		●	●
Diacetone alcohol	166	143	No		0.93		123-42-2	●	♦	♦	♦	○	○	●	♦	♦	●	♦	○	○	○	●	●	♦	♦		●	●
DI Water	212	none	No	1	1.00	78		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		●	●
Diethyl maleate	437	199	No		1.06		141-05-9	●	●	●	●	♦	♦	●	●	●	●	●	●	♦	♦	●	●	●	●		●	●
DIGLYME (Diethylene glycol dimethyl ether)	140	127	No		0.94	29	111-96-6	●	●	●	●	♦	♦	●	●	●	●	●	●	♦	♦	●	●	●	●		●	●
1,2-dimethoxypropane (proplyene glycol dimethyl ether)							7778-85-0																					
Dimethyl acetamide	331	171	No		0.94		127-19-5	●	●	●	●	♦	♦	●	●	●	●	●	●	♦	♦	●	●	●	●			●
Dimethyl cyclohexane	244	45	Yes		0.78		27195-67-1	●	○	○	○	○	○	F	○	○	F	○	○	○	○	F	○	○	○	●	○	●
Dimethyl heptanone (DMH)								●	♦	♦	♦	○	○	●	♦	♦	●	♦	♦	○	○	●	●	♦	♦			
Dimethyl maleate	392	235	No	3.54	1.15	38.29		●	●	●	●	♦	♦	●	●	●	●	●	●	♦	♦	●	●	●	●		●	●
Dimethyl sulfoxide	372	203	No	1.996	1.10	43	67-68-5	●	●	●	●	♦	♦	●	●	●	●	●	●	♦	♦	●	●	●	●	●	●	●
Dioxolane	74	35	Yes		1.06		646-06-0	●	●	●	●	F	F	F	F	F	F	F	F	F	F	F	F	F	F		●	●
EEP (Ethyl 3-ethoxypropionate)	329	138	No		0.95		763-69-9	●	●	●	●	♦	♦	●	●	●	●	●	●	♦	♦	●	●	●	●	●		●
ECA, EEA, EGMEA (Cellosolve acetate)	313	135	No	1.25	0.98	32	111-15-9	●	●	●	●	♦	♦	●	●	●	●	●	●	♦	♦	●	●	●	●	●	●	●
Ethanone (2,2-dimethoxy-1,2-diphenyl, dimethoxy phenylacetophenone)							24650-42-8	●									●			♦	♦	●						
Ethyl Acetate	77	26	Yes	0.454	0.90	24	141-78-6	●	●	●	●	♦	♦	F	F	F	F	F	F	♦	♦	F	F	F	F		●	●
Ethyl acetyl acetate (ethyl acetoacetate)	358	183	No	1.419	1.02	32	141-97-9	●	●	●	●	♦	♦	●	●	●	●	●	●	♦	♦	●	●	●	●		●	●
Ethyl alcohol	78	48	Yes	1.2	0.78		64-17-5	●	●	●	●	♦	♦	F	F	F	F	F	F	♦	♦	F	F	F	F	●	●	●
Ethyl benzene	136	72	Yes		0.86	29	100-41-4	●	○	○	○	○	○	F	○	○	F	○	○	○	○	F	○	○	○	●	○	●
Ethyl cyclohexane	130	66	Yes	0.78	0.79	25	1678-91-7	●	○	○	○	○	○	F	○	○	F	○	○	○	○	F	○	○	○	●	○	●
Ethyl lactate	309	120	No	2.44	1.04	29	687-47-8	●	●	●	●	♦	♦	●	●	●	●	●	●	♦	♦	●	●	●	●	●	●	●
Ethyl malonate (diethyl malonate, malonic ester)	388	200	No		1.06		105-53-3	●	●	●	●	♦	♦	●	●	●	●	●	●	♦	♦	●	●	●	●	●	●	●
Ethyl pyruvate	144	114	No		1.04		617-35-6	●	●	●	●	♦	♦	●	●	●	●	●		♦	♦	●					●	●
Gamma Butyrolactone	204	209	No		1.14	43	96-48-0	●	●	●	●	♦	♦	●	●	●	●	●	●	♦	♦	●	●	●	●	●	●	●
2-Heptanone (methyl amyl ketone)	150	117	No	0.81	0.82	26	110-43-0	●	♦	♦	♦	♦	♦	●	♦	♦	●	♦		♦	♦	●					♦	●
Hexane	155	-10	Yes	0.313	0.77	18	110-54-3	●	○	○	○	○	○	F	○	○	F	○	○	○	○	F	○	○	○	●	○	●
2-Hexanone (methyl butyl ketone, propylacetone)	127	95	Yes		0.81	26	591-78-6	●	♦	♦	♦	F	F	F	F	F	F	F	F	F	F	F	F	F	F		♦	●
HMDS (Hexamethyldisilazane)	259	48	Yes	1	0.77		999-97-3	●	♦	♦	♦	F	F	F	F	F	F	F	F	F	F	F	F	F	F	●	○	●
Hexamethyldisiloxane	214	27	Yes		0.76		107-46-0	●	♦	♦	♦	F	F	F	F	F	F	F	F	F	F	F	F	F	F		♦	●
1,6-hexanediol diacrylate		230	No		1.01		13048-33-4	●	●	●	●	♦	♦	●	●	●	●	●	●	♦	♦	●	●	●	●		●	●
2-hydroxy-2-methylpropiophenone	216	230	No		1.08		7473-98-5	●	●	●	●	♦	♦	●	●	●	●	●	●	♦	♦	●	●	●	●		●	●
IPA (Isopropyl alcohol, 2-Propanol)	180	53	Yes	2.5	0.78	22	67-63-0	●	●	●	●	F	F	F	F	F	F	F	F	F	F	F	F	F	F	●	●	●
Isoamyl Acetate	142	77	Yes				123-92-2	●	♦	♦	♦	♦	♦	F	F	F	F	F	F	♦	♦	F	F	F	F		♦	●
Isobutyl ketone (2,6-Dimethyl-4-heptanone, diisopropylacetone)	334	120.2	No		0.85		108-83-8	●	♦	♦	♦	♦	♦	●	♦	♦	●	♦	♦	♦	♦	●	♦	♦	♦	●	♦	●
MCA (methyl cellosolve acetate, 2-Methoxyethyl acetate)	145	111	No			24	110-49-6	●	●	●	●	♦	♦	●	●	●	●	●	●	♦	♦	●	●	●	●		●	●
Mesitylene (1,3,5 trimethylbenzene)	162	112	No			28	108-67-8	●	○	○	○	○	○	●	○	○	●	○	○	○	○	●	○	○	○		○	●
Methyl acetate (methyl acetic ester)	136	15	Yes	0.33	0.93	25	79-20-9	●	♦	♦	♦	♦	♦	●	♦	♦	●	♦	♦	♦	♦	●	♦	♦	●		♦	●
Methyl Alcohol	149	52	Yes	0.6	0.79		67-56-1	●	●	●	●	F	F	F	F	F	F	F	F	F	F	F	F	F	F	●	●	●
Methyl Ethyl Ketone (2-Butanone)	80	26	Yes	0.42	0.80		78-93-3	●	♦	♦	♦	♦	♦	F	F	F	F	F	F	♦	♦	F	F	F	F		♦	●
2-Methoxy-1-propanol (monopropylene glycol methyl ether)	248	102	No		0.92		1589-47-5	●	●	●	●	♦	♦	●	●	●	●	●	●	♦	♦	●	●	●	●			●
MIBK (Methyl isobutyl ketone, 4-Methyl-2-pentanone)	239	56	Yes	0.8	0.80	24	108-10-1	●	♦	♦	♦	♦	♦	F	F	F	F	F	F	♦	♦	F	F	F	F		♦	●
Mineral Oil	680	419	No		0.88		8012-95-1	●	♦	♦	♦	♦	♦	●	♦	♦	●	♦	♦	♦	♦	●	♦	♦	♦	●	♦	●
Mineral Spirits	180	102	No		0.78		8052-41-3	●	○	○	○	○	○	●	○	○	●	○	○	○	○	●	○	○	○	●	○	●
MMP (Methyl 3-methoxypropionate)	288	118	No			30	3852-09-3	●	●	●	●	♦	♦	●	●	●	●	●	●	♦	♦	●	●	●	●	●	●	●
Morpholine	264	96	Yes	2.23	1.00		110-91-08	●	●	●	●	♦	♦	F	F	F	F	F	F	♦	♦	F	F	F	F	♦	●	●
NANO EBR (70-80% ethylene glycol 20-30% PGME)						40-42.5		●	●	●	●	♦	♦	●	●	●	●	●	●	♦	♦	●	●	●	●			
NMP (N-methyl pyrrolidinone)	396	187	No	1.7	1.03	41	872-50-4	●	●	●	●	♦	♦	●	●	●	●	●	●	♦	♦	●	●	●	●	♦	●	●
NFC-620								●	●	●	●	♦	●	●	●	●	●	●	●	♦	●	●	●	♦	●			
NFC-540								●	●	●	●	♦	●	●	●	●	●	●	●	♦	●	●	●	♦	●			
2,2,3,3,4,4,5,5-Octafluoro-1-pentanol	286	168	No		1.67		355-80-6	●	●	●	●	♦	♦	●	●	●	●	●	●	♦	♦	●	●	●	●			
Octamethyltrisiloxane	307	85	Yes		0.82		107-51-7	●	♦	♦	♦	♦	♦	F	F	F	F	F	F	♦	♦	F	F	F	F		♦	●
Orthodichlorobenzene (1,2-Dichlorobenzene)	180	150	No			37	95-50-1	●	○	○	○	○	○	●	○	○	●	○	○	○	○	●	○	○	○		○	●
2- Pentanone (methly propyl ketone)	100	45	Yes	0.49		23	107-87-9	●	♦	♦	♦	♦	♦	F	F	F	F	F	F	♦	♦	F	F	F	F		♦	●
Petroleum Spirits (Petroleum Ether)	140	-22	Yes		0.66		8032-32-4	●	○	○	○	○	○	●	○	○	●	○	○	○	○	●	○	○	○	●	○	●
PGE (Propylene glycol monoethyl ether, 1-ethoxy-2 propanol)	270	107.6	No		0.90		1569-02-4	●	●	●	●	♦	♦	●	●	●	●	●	●	♦	♦	●	●	●	●	●	●	●
PGME (Propylene glycol monomethyl ether, 1 methoxy-2-propanol)	117	93	Yes			28	107-98-2	●	●	●	●	♦	♦	F	F	F	F	F	F	♦	♦	F	F	F	F	●	●	●
PGMEA (Propylene glycol monomethyl ether acetate,1-Methoxy-2-propyl acetate	295	108	No	1.14		28	108-65-6	●	●	●	●	♦	♦	●	●	●	●	●	●	♦	♦	●	●	●	●	●	●	●
PGPE (Propylene glycol propyl ether, 1-propoxy-2-propanol)	302	119	No		0.89		1569-01-3	●	●	●	●	♦	♦	●	●	●	●	●	●	♦	♦	●	●	●	●	●	●	●
2-Propenamide (N,N-dimethylarcrylamide)	176	161	No		0.96		2680-03-7	●	●	●	●	♦	♦	●	●	●	●	●	●	♦	♦	●	●	●	●		●	●
2-Propenoic acid	190	92	Yes		1.05		2530-85-0	●	●	●	●	F	F	F	F	F	F	F	F	F	F	F	F	F	F		●	●
Propyl Alcohol	207	74	Yes			21	71-23-8	●	●	●	●	F	F	F	F	F	F	F	F	F	F	F	F	F	F	●	●	●
Sulfolane (tetramethylene sulfone)	545	330	No	10.3	1.26	36	126-33-0	●	●	●	●	♦	♦	●	●	●	●	●	●	♦	♦	●	●	●	●			
Tert-butyl-benzene (TBB)								●	○	○	○	○	○	●	○	○	●	○	○	○	○	●	●	○	○			
2,2,3,3-Tetrafluoro-1-propanol (TFP)	228	110	No		1.47		76-37-9	●	●	●	●	♦	♦	●	●	●	●	●	●	♦	♦	●	●	●	●			
Tetrahydrofuran	151	5	Yes	0.46	0.88	25	109-99-9	●	♦	♦	♦	F	F	F	F	F	F	F	F	F	F	F	F	F	F		♦	●
Trichloroethylene	188	-100	Yes	0.54	1.46	30	79-01-6	●	●	●	●	F	F	F	F	F	F	F	F	F	F	F	F	F	F	●	●	●
2.5% TMAH (Tetramethyl ammonium hydroxide) in DI	212	99	Yes		1.46	70	75-59-2	●	●	●	●	●	○	●	●	●	●	●	●	●	○	●	●	●	●	●	●	●
Toluene	110	50	Yes	0.59	0.87	29	108-88-3	●	○	○	○	○	○	F	○	○	F	○	○	○	○	○	○	○	○	●	○	●
n-vinyl pyrrolidone																												
Xylene	279	81	Yes	0.8	0.86	28	1330-20-7	●	○	○	○	○	○	F	○	○	F	○	○	○	○	F	○	○	○	●	○	●

**Mykrolis does not recommend the use of disposable filters with flammable solvents due to possible static build-up and discharge.

Fully compatible is defined as less than 5% dimensional change, <10% loss in strength and little or no chemical attack.

Limited compatibility is defined as less than 10% dimensional change, < 20% loss in strength, and slight chemical attack (swelling or absorption). There may be slight extraction of low molecular weight polymer and other additives if they are present (anti-oxidants, UV stabilizers, etc.)

Symbol Legend

●	fully compatible
♦	limited compatibility
	compatibility not known
○	not compatible
F	not recommended due to flammability concerns**
	spontaneously wettable