

Optical Glass Equivalency Guide

Code	CDGM	SCHOTT	OHARA	HOYA	SUMITA	Chemical properties**			
						Dw	DA	RC(S)	RA(S)
1254	H-ZLaF90			001-255 TAFD40		1	1	1	1
2207	D-ZF93			(002-193) (M-FDS2)		1	4	1	4
3283	H-ZLaF92		003283 S-LAH79			1	1	1	1
438945	H-FK95N		(439950) (S-FPL53)	(437-951) (FCD100)	(434-950) (K-CAFK95)	1	2	1	2
438945	D-FK95					1	2	1	2
457903	H-FK71			457-903 FCD10A	(459-900) (K-PFK90)	1	2	1	2
470669	H-QK1				487-704 K-FK5	5	5	1	3
487704	H-QK3L	487704 N-FK5	487702 S-FSL5	487-704 FC5		2	4	1	3
487704	D-QK3L	487704 N-FK5				2	4	1	3
487704	H-QK3LGTi	487705 FK5HTi	487703 S-FSL5Y			2	4	1	3
497816	H-FK61	497816 N-PK52A	497816 S-FPL51	497-816 FCD1	497-815 K-PFK80	1	5	1	3
497816	H-FK61B	497816 N-PK52A	497816 S-FPL51	497-816 FCD1B	497-815 K-PFK80	1	3	1	2
497816	D-FK61			497-816 M-FCD1	497-815 K-PFK80	1	2	1	1
497816	D-FK61A			497-816 M-FCD1		1	3	1	2
500621	H-K1					2	1	2	1
500660	H-K2	500658 BK4	500660 BSL4	500-660 BSC4		2	1	1	1
505647	H-K3	505650 BK5				3	4	2	3
508611	K4A					1	2	1	3
510634	H-K5	510635 BK1	510636 BSL1	510-634 BSC1		3	1	3	1
511605	H-K6	511604 K7	511605 NSL7	511605 C7		2	1	3	1
515606	H-K7					1	1	3	1
516568	H-K8					2	1	3	1
516641	D-K9	516641 P-BK7	516641 L-BSL7			1	2	1	2
516641	D-K9GT					1	2	1	2
517522	H-KF6		517524 S-NSL36	517-522 E-CF6		1	1	1	1
517642	H-K9L	517642 N-BK7	516641 S-BSL7	517-642 BSC7	516-641 K-BK7	3	1	1	1
517642	H-K9LGT	517642 N-BK7HT				3	1	1	1
518590	H-K10		518590 S-NSL3	518-590 E-C3		3	1	3	1
518635	D-K 59					1	1	1	1
519633	H-K90GTi	(517642) (N-BK7HTi)	(516643) (BSL7Y)			3	1	1	1
522595	H-K50	522595 N-K5	22598 S-NSL5	522-595 C5		2	3	3	1
523586	H-K51		523585 NSL51	523586 C12		2	1	2	1
525704	D-PK3					3	3	1	1
526602	H-K11	526600 BALK1	526600 NSL21	526-601 BACL1		2	1	3	1
530605	H-BaK1					1	1	1	1
532488	H-QF6A	532489 N-LLF6	532489 S-TIL6	532-488 E-FEL6		1	1	1	1
532488	QF6					2	1	3	1
534555	H-K12	534553 ZK5	534555 ZSL5	534-554 ZNC5		2	1	4	1
540597	H-BaK2	540597 N-BAK2	540595 S-BAL12	540-597 BAC2		1	1	1	2
541472	H-QF8		541472 S-TIL2	541-472 E-FEL2		3	2	3	1
541472	QF8					2	1	3	1



OUR PRODUCTS:

- Lens
- Lens Assembling
- Prisms
- Windows
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- Diffractive Optical Elements (DOE)
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						Dw	DA	RC(S)	RA(S)
547628	H-BaK3		548628 BAL21			1	2	1	3
548458	H-QF1		548458 S-TIL1	548-458 E-FEL1		1	1	1	1
548459	QF1					1	1	3	1
552634	H-BaK4	552635 N-PSK3	552638 BAL23	552-634 PCD3		3	3	1	2
561583	H-BaK5					1	2	1	1
564608	H-BaK6	564608 N-SK11	564607 S-BAL41	564-608 BACD11		1	2	1	3
567428	H-QF56		567428 S-TIL26	567-428 E-FL6		1	1	3	1
569560	H-BaK7	569560 N-BAK4	569563 S-BAL14	569-560 BAC4		1	1	1	1
569560	H-BaK7GT	569560 N-BAK4HT				1	1	1	1
569561	H-BaK7A	569560 N-BAK4	569563 S-BAL14	569-560 BAC4		1	1	1	1
569630	H-ZK1	569631 PSK2	569631 BAL22	569-631 PCD2		3	4	2	3
569713	H-ZPK7					1	1	1	1
569713	D-ZPK7					1	1	1	1
570495	H-BaF2					2	1	1	1
573575	H-BaK8	573576 N-BAK1	573578 S-BAL11	573-575 BAC1		1	2	1	3
575413	QF3					1	1	3	1
575415	H-QF3		575415 S-TIL27			1	1	1	1
580537	H-BaF3	580539 N-BALF4				1	1	1	1
581408	H-QF50A		581407 S-TIL25	581-409 E-FL5		2	1	3	1
581409	H-QF50		581407 S-TIL25	581-409 E-FL5		2	1	2	1
581409	QF50					1	1	3	1
581409	QF50GTi	581409 LF5HTi	581408 PBL25Y			1	1	3	1
582420	QF5	582421 LF3	582421 PBL23	582-420 FL3		1	1	2	1
583465	BaF4					1	1	1	1
583466	H-BaF4					1	1	1	1
583594	D-ZK2		583594 L-BAL42	583-595 M-BACD12	(587-598) (K-CSK120)	1	6	2	3
583595	H-ZK2	583595 SK12	583594 S-BAL42	583-595 BACD12		1	6	1	3
587596	D-ZK2L					1	6	2	3
589612	D-ZK3	589612 P-SK58A	589612 L-BAL35	589-613 M-BACD5N	(591-607) (K-PSK100)	3	6	2	3
589613	H-ZK3	589613 N-SK5	589612 S-BAL35	589-613 BACD5	589-612 K-SK5	2	3	1	3
589613	H-ZK3A	589613 N-SK5	589612 S-BAL35	589-613 BACD5		2	3	3	2
592607	D-ZK3L					2	6	2	3
593673	H-ZPK3			593-670 PCD51	(595-678) (K-PSK400)	1	4	4	1
593683	H-ZPK5			593-686 FCD505	(592-683) (K-GFK68)	1	2	1	1
593683	D-ZPK5			593-686 FCD515	(592-683) (K-GFK68)	1	2	1	1
594673	D-ZPK3			(592-670) (M-PCD51)		1	4	4	1
596392	H-QF14		596392 S-TIM8	596-392 E-F8		1	3	2	1
603380	H-F1		603380 S-TIM5	603-380 E-F5		2	1	2	1
603380	F1	603380 F5	603380 PBM5	603-380 F5		2	1	3	1
603606	H-ZK14	603606 N-SK14	603607 S-BSM14	603-607 BACD14	603-607 K-SK14	2	4	3	3
603655	H-ZPK2A		603655 S-PHM53			1	4	3	1



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606439	H-BaF5	606437 N-BAF4	606437 S-BAM4			1	1	1	1
607567	H-ZK50	607567 N-SK2	607568 S-BSM2	607-567 BACD2		1	5	1	3
607567	H-ZK50GT	607567 N-SK2HT				1	5	1	3
608462	H-BaF6	(609466) (N-BAF52)				2	1	1	1
609579	D-ZK79	(610579) (P-SK60)				2	2	3	3
609589	H-ZK4	609589 SK3	609590 BSM3	609-589 BACD3		1	3	1	3
611558	H-ZK5	611559 SK8	611559 BSM8	611-558 BACD8		1	6	1	3
612441	TF3					2	6	1	3
613370	H-F2		613370 S-TIM3	613-370 E-F3		1	1	1	1
613370	F2	613370 F3	613370 PBM3	613-370 F3		2	1	3	2
613441	H-TF3L	613445 N-KZFS4	613443 S-NBM51	613-444 E-ADF10		1	1	1	1
613586	H-ZK6	613586 N-SK4	613587 S-BSM4	613-586 BACD4	613-586 K-SK4	2	3	1	3
613604	H-ZK7A					3	4	1	4
613606	H-ZK7					3	6	1	3
614400	H-BaF7					1	1	1	1
614400	BaF7					1	1	1	1
614551	H-ZK8	614552 SK9	614550 S-BSM9	614-551 BACD9		1	6	1	3
617366	F3	617366 F4	617366 PBM4	617-366 F4		2	1	3	1
617367	H-F3					2	1	3	1
617539	H-ZK20	617539 SSK1	617540 BSM21	617-539 BACED1		1	6	1	3
618634	H-ZPK1A	618634 N-PSK53A	618634 S-PHM52	618-634 PCD4	618-634 K-PSKn2	1	4	1	1
620364	H-F4	620364 N-F2	620363 S-TIM2	620-363 E-F2		2	1	1	1
620364	F4	620364 F2	620363 PBM2	620-363 F2		1	2	3	2
620364	F4GTi	620364 F2HT	620363 PBM2Y			1	2	3	2
620603	H-ZK9B	620603 N-SK16	620603 S-BSM16	620-604 BACD16	620-603 K-SK16	3	4	1	3
620603	H-ZK9A	620603 N-SK16	620603 S-BSM16	620-603 BACD16		3	4	1	3
621638	D-ZPKIA			(619-639) (M-PCD4)	(618-634) (K-PSKn2)	1	4	1	1
622532	H-ZBaF1	622533 N-SSK2	622532 S-BSM22			1	4	1	3
622567	H-ZK10					1	3	1	3
623569	H-ZK10L	623570 N-SK10	623570 S-BSM10	623-569 E-BACD10		1	3	1	3
623581	H-ZK21	623580 N-SK15	623582 S-BSM15	623-581 BACD15	623-581 K-SK15	2	4	1	3
624359	H-F5					2	1	2	1
624359	F5		621359 PBM11			1	1	2	1
624582	D-ZK21			(623-582) (M-BACD15)		2	3	2	5
625356	F6	625356 F7		625-356 F7		1	3	3	3
626357	H-F13		626357 S-TIM1	626-357 E-F1		1	1	1	1
626357	F13	626357 F1	626357 PBM1	626-357 F1		1	3	1	1
626391	H-BaF8	626390 BASF1	626392 BAM21	626-391 BAFD1		2	1	1	1
636354	F7	636353 F6	636354 PBM6	636-353 F6		1	2	2	2
639555	H-ZK11	639554 N-SK18	639554 S-BSM18	639-555 BACD18	639-555 K-SK18	2	4	1	3
640345	H-F51		640345 S-TIM27	640-346 E-FD7		1	1	2	1



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						Dw	DA	RC(S)	RA(S)
640483	ZBaF2					1	3	1	3
640602	H-LaK4L	640601 N-LAK21	640601 S-BSM81	640-602 LACL60	641-601 K-LaKn2	4	4	1	3
648338	H-ZF1	648338 N-SF2	648338 S-TIM22	648-338 E-FD2	648-339 K-SFLD2	1	1	1	1
648338	ZF1	648339 SF2	648338 PBM22	648-338 FD2	652-583 K-LaK7	1	2	1	3
648339	H-ZF1A	648338 N-SF2	648338 S-TIM22	648-338 E-FD2		2	1	2	1
651559	H-LaK10	651559 N-LAK22	651562 S-LAL54	650-557 LACL12		1	6	1	3
652584	H-LaK50A	652585 N-LAK7	652585 S-LAL7	652-584 LAC7		3	6	1	3
654337	ZF8	654337 SF9	654336 PBM29	654-337 FD9		1	2	1	2
654395	H-TF5	654397 N-KZFS5	654397 S-NBH5	654-396 E-ADF50		2	1	3	1
657511	H-ZBaF3					1	3	1	3
658509	H-ZBaF50	658509 N-SSK5	658509 S-BSM25	658-509 BACED5		1	3	1	3
660574	H-LaK1	660573 LAK11		660-573 LAC11		3	6	1	3
664355	H-ZBaF4	664360 N-BASF2				1	1	1	1
665546	H-LaK11					1	6	1	3
667331	H-ZF39		667330 S-TIM39			1	1	2	1
667484	H-ZBaF16	667484 BAFN11	667483 S-BAH11	667-483 BAF11		1	3	1	3
668419	ZBaF17	668419 BASF6	668419 BAH26	668-419 BAFD6		2	3	1	3
669554	D-LaK 70					1	6	1	3
670472	H-ZBaF52	670471 N-BAF10	670473 S-BAH10	670-472 BAF10	(665-473) (K-LCV93)	1	2	1	3
670517	H-LaK67		670516 LAL53			1	6	1	3
671473	H-ZBaF5					1	2	1	3
673322	H-ZF2	673323 N-SF5	673321 S-TIM25	673-322 E-FD5	673-322 K-SFLD5	1	1	1	1
673322	ZF2	673322 SF5	673321 PBM25	673-322 FD5		1	2	1	3
678549	D-LaK5		678549 L-LAL12			1	3	4	4
678555	H-LaK5A	678552 N-LAK12	678553 S-LAL12	678-555 LAC12	678-555 K-LaK12	3	6	1	3
683445	ZBaF51	683445 BAF50	683447 BAH51	683-447 BAF22		1	6	1	3
689311	D-ZF10	689313 P-SF8	689310 L-TIM28	689-312 M-FD80	(692-296) (K-CD300)	2	1	3	1
689312	H-ZF10	689313 N-SF8	689311 S-TIM28	689-312 E-FD8	689-311 K-SFLD8	1	1	1	1
689312	ZF10	689313 SF8	689311 PBM28	689-312 FD8	689-311 K-SFLD8	1	2	1	3
691548	H-LaK59A	691547 N-LAK9	691548 S-LAL9	691-547 LAC9	691-548 K-LaK9	3	4	1	5
692545	H-LaK2A					3	3	1	3
694492	H-LaF1		(694508) (S-LAL58)			1	3	1	3
694531	D-LaK6	694532 P-LAK35	694532 L-LAL13	694-532 M-LAC130	694-531 K-VC80	1	6	1	3
694534	H-LaK6A	694533 N-LAK13	694532 S-LAL13	694-533 LAC13	694-534 K-LaK13	2	6	1	3
697555	H-LaK51A	697554 N-LAK14	697555 S-LAL14	697-555 LAC14	697-556 K-LaK14	1	3	1	3
697562	H-LaK12	697562 LAK24	697565 LAL64			1	3	1	6
699301	H-ZF11	699302 N-SF15	699301 S-TIM35	699-301 E-FD15L	(692-296) (K-CD300)	1	1	2	1
699301	ZF11	699302 SF15	699301 PBM35	699-301 FD15	(692-296) (K-CD300)	1	1	1	1
700481	H-LaF51		700481 S-LAM51			2	3	1	4
702412	H-ZBaF20	702410 N-BASF52	702412 S-BAH27	702-412 BAFD7		1	2	1	3
713538	H-LaK7A	713538 N-LAK8	713539 S-LAL8	713-539 LAC8	713-539 K-LaK8	1	3	1	3



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717295	H-ZF3	717296 N-SF1	717295 S-TIH1	717-295 E-FD1L	717-295 K-SFLD1	1	1	1	1
717295	ZF3	717295 SF1	717295 PBH1	717-295 FD1	717-295 K-SFLD1	1	2	1	2
717479	H-LaF2	717480 N-LAF3	717479 S-LAM3	717-480 LAF3	717-479 K-LaF3	1	6	1	3
720437	H-LaF62		720437 S-LAM52			1	3	1	3
720503	H-LaK8A	720506 N-LAK10	720502 S-LAL10	720-503 LAC10	720-503 K-LaK10	1	3	1	3
720503	H-LaK8B	720506 N-LAK10	720502 S-LAL10	720-503 LAC10		1	3	1	4
723380	H-ZBaF21		723380 S-BAH28	723-380 BAFD8		1	2	1	3
728283	H-ZF4A	728285 N-SF10	728285 S-TIH10	728-283 E-FD10L	728-284 K-SFLD10	1	1	1	1
728283	H-ZF4AGT				728-284 K-SFLD10	1	1	1	1
728283	ZF4	728284 SF10	728285 PBH10	728-283 FD10		1	6	3	3
729547	H-LaK52	729545 N-LAK34	729547 S-LAL18	729-547 TAC8	729-547 K-LaK18	1	3	1	3
731405	D-LaF79		731405 L-LAM69	731-405 M-LAF81		1	6	1	3
731539	D-LaK52			729-540 M-TAC80	734-512 K-LaKn12	1	3	2	2
734515	H-LaK54		734515 S-LAL59	734-511 TAC4		1	3	1	3
740282	ZF5	740282 SF3	740283 PBH3	740-282 FD3	741-527 K-LaKn14	1	2	1	2
740283	H-ZF5		740283 S-TIH3		743-492 K-LaFn5	1	1	1	1
741278	H-ZF50		741278 S-TIH13	741-278 E-FD13		1	1	1	1
741278	ZF50	741276 SF13	741278 PBH13	741-278 FD13	744-449 K-LaF2	1	2	1	3
741526	H-LaK61		741527 S-LAL61	741-526 TAC2		1	6	1	3
743492	H-LaF53	743494 N-LAF35	743493 S-LAM60	743-492 NBF1		1	3	1	3
743493	D-LaF53		743-493 L-LAM60	743-493 M-NBF1		1	6	1	3
744449	H-LaF3B	744449 N-LAF2	744448 S-LAM2	744-449 LAF2		1	3	1	3
747510	H-LaK3					1	3	1	3
750350	H-LaF4	750348 N-LAF7	750353 S-LAM7	750-350 E-LAF7		1	2	1	3
750350	H-LaF4GT					1	2	1	3
754375	H-LaFL5					1	5	1	3
755275	H-ZF6	755274 N-SF4	755275 S-TIH4	755-275 E-FD4L	755-275 K-SFLD4	1	1	2	1
755275	ZF6	755276 SF4	755275 PBH4	755-275 FD4	755-275 K-SFLD4	1	2	1	3
755523	H-LaK53B	755523 N-LAK33B	755523 S-YGH51	755-523 TAC6	755-524 K-LaSKn1	1	3	1	2
755523	H-LaK53A					1	6	1	3
757477	H-LaF6LA	757478 LAFN24	757478 S-LAM54	757-477 NBF2		1	6	1	3
762266	H-ZF12	762265 N-SF14	762265 S-TIH14	762-266 FD140	762-265 K-SFLD14	1	1	2	1
762266	ZF12	762265 SF14	762265 PBH14	762-266 FD14		1	3	1	3
762401	H-LaF55		762401 S-LAM55			2	3	1	4
768493	D-LaF050			768-492 M-TAF101	(766-498) (K-LAFK55T)	1	3	1	3
773496	H-LaF 50B	773496 N-LAF34	773496 S-LAH66	773-496 TAF1	773-496 K-LaSFn7	1	3	1	3
774496	D-LaF50			(773-495) (M-TAF1)	(772-500) (K-LaFK50)	1	3	1	4
782371	H-LaF7	782372 LAF22A				1	5	1	3
785257	H-ZF13	785257 N-SF11	785257 S-TIH11	785-257 FD110	(785-259) (K-SFLD11)	1	1	1	1
785257	H-ZFI3GT					1	1	1	1
785258	ZF13	785258 SF11	785257 PBH11	785-257 FD110		1	3	1	3



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10 DAYS LENS SAMPLING

Optical Glass Equivalency Guide

Code	CDGM	SCHOTT	OHARA	HOYA	SUMITA	Chemical properties**			
						Dw	DA	RC(S)	RA(S)
785261	ZF51	785261 SF56A	785262 PBH23	785-261 FDS3		1	3	1	3
786442	H-LaF52	786441 N-LAF33	786442 S-LAH51	786-439 NBFD11	(785-437) (K-LaSFn4)	1	2	1	3
788475	H-LaFIOLA	788475 N-LAF21	788474 S-LAH64	788-475 TAF4	788-474 K-LaSFn16	1	3	1	3
800422	H-LaF54	800424 N-LAF36	800422 S-LAH52	800-423 NBFD12	800-423 K-LaSFn3	1	2	1	3
801350	H-ZLaF66	801350 N-LASF45	801350 S-LAM66			1	3	1	3
801350	H-ZLaF66GT	801350 N-LASF45HT			804-466 K-LaSFn6	1	3	1	3
802443	H-ZLaFI	802443 LASF11		802-443 NBFD14	804-466 K-LaSFn6	1	6	1	3
803455	D-ZLaF50			(801-455) (M-TAF31)	805-254 K-SFLD6	1	3	1	4
803468	H-ZLaF2A	803468 LASF1	803467 LAH62		805-254 K-SFLD6	1	3	1	3
804466	H-ZLaF50E	804465 N-LASF44	804466 S-LAH65VS	804-465 TAF3D	805-396 K-LaSFn2	1	3	1	2
804466	H-ZLaF50D	804465 N-LASF44	804466 S-LAH65VS	804-465 TAF3		1	3	1	2
805255	H-ZF7LA	805254 N-SF6	805254 S-TIH6	805-255 FD60		1	1	1	1
805255	H-ZF7LAGT	805254 N-SF6HT ultra		805-255 FD60-W	806-407 K-LaSFn1	1	1	1	1
805255	ZF7L	805254 SF6	805254 PBH6	805-255 FD6		1	4	1	3
805255	ZF7LGT				(810-410) (K-VC89)	1	4	1	3
805396	H-ZLaF51		(804396) (S-LAH63)	805-396 NBFD3	816-467 K-LaSFn9	1	3	1	3
806254	ZF7					1	5	1	3
806333	H-ZLaF56B			806-333 NBFD15		1	2	1	3
806410	H-ZLaF52A	806406 N-LASF43	806409 S-LAH53V	806-407 NBFD13		1	3	1	4
806410	H-ZLaF52	806406 N-LASF43	806409 S-LAH53V	806-407 NBFD13		1	3	1	3
808227	H-ZF71			808-228 FD225		1	1	1	1
808227	H-ZF71GT		808228 S-NPH1W	808-228 FD225		1	1	1	1
809410	D-ZLaF81	809405 P-LASF50		(808-409) (MC-NBFD135)		1	6	1	3
810410	D-ZLaF52LA	810409 P-LASF51				1	6	1	3
816465	H-ZLaF69		816466 S-LAH59	816-466 TAF5		1	2	1	3
816466	H-ZLaF69A		816466 S-LAH59	816-466 TAF5		1	2	1	3
822427	D-ZLaF61			(821-427) (M-TAFD51)		2	3	1	4
834372	H-ZLaF53B	834373 N-LASF40	834372 S-LAH60	834-373 NBFD10	834-373 K-LaSFn14	1	2	1	4
834372	H-ZLaF53BG				835-427 K-LaSFn8	1	2	1	4
835427	H-ZLaF55D	835431 N-LASF41	835427 S-LAH55VS	835-427 TAFD5G	835-427 K-LaSFn8	1	2	1	2
835427	H-ZLaF55C	835431 N-LASF41	835427 S-LAH55VS	835-427 TAFD5F		1	2	1	3
846401	D-ZLaF85LN		854404 L-LAH85V	(851-401) (M-TAFD305)		1	2	2	3
847238	H-ZF52	847238 N-SF57	847238 S-TIH53	847-238 FDS90	847-239 K-SFLDn3	1	1	2	1
847238	H-ZF52GT	847238 N-SF57HT ultra	847238 S-TIH53W	847-238 FDS90-SG	847-239 K-SFLDn3	1	1	2	1
847238	H-ZF52TT					1	1	2	1
847238	H-ZF52A	847238 N-SF57	847238 S-TIH53	847-238 FDS90		1	1	2	1
847238	ZF52	847238 SF57	847239 PBH53	847-238 FDS9		1	6	1	3
850300	H-ZLaF76A		850300 S-NBH57			1	1	1	2
850301	H-ZLaF76		850300 S-NBH57			1	3	1	3
850322	H-ZLaF71AGT	850322 N-LASF9				1	1	1	2
850323	H-ZLaF71		850323 S-LAH71			1	3	1	3



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						Dw	DA	RC(S)	RA(S)
852401	D-ZLaF85A		(854404) (L-LAH85V)	(851-401) (M-TAFD305)		1	5	1	3
854406	D-ZLaF85L		854404 L-LAH85V	(851-401) (M-TAFD305)	(854-406) (K-VC185)	1	5	1	3
855366	H-ZLaF3	855366 LASF13		855-366 TAFD13		1	5	1	3
855406	D-ZLaF85LS		854404 L-LAH85V	(851-401) (M-TAFD305)		1	2	1	2
881402	H-ZLaF73			881401 TAFD33		1	2	2	1
883392	H-ZLaF68N					1	1	1	1
883408	H-ZLaF68B	883408 N-LASF31A	883408 S-LAH58	883-408 TAFD30	883-408 K-LaSFn17	1	1	1	2
883409	H-ZLaF68C	883408 N-LASF31A	883408 S-LAH58	883-408 TAFD30		1	1	1	2
884372	D-ZLaF67			(882-372) (M-TAFD307) (900-374)		1	2	1	3
901371	H-ZLaF78B			(TAFD37A)		1	1	1	1
904313	H-ZLaF75A	904313 N-LASF46A	904313 S-LAH95	904-313 TAFD25		1	2	1	3
904314	H-ZLaF75B	904313 N-LASF46B	904313 S-LAH95	904-313 TAFD25		1	1	1	1
911353	H-ZLaF4LA			911-353 TAFD35		1	1	1	2
911353	H-ZLaF4LB			911-353 TAFD35		1	1	2	1
923189	H-ZF72A		923189 S-NPH2			1	1	1	1
923189	H-ZF2AGT					1	1	1	1
923209	H-ZF62	923209 N-SF66		923-209 E-FDS1		1	1	1	1
923209	H-ZF62GT	923209 N-SF66		923-209 E-FDS1-W		1	1	1	1
946179	H-ZF88			946-180 FDS18		1	1	1	1
946179	H-ZF88GT			946-180 FDS18-W		1	1	1	1
954323	H-ZLaF89L		954323 S-LAH98	954-323 TAFD45		1	1	1	1
959175	H-ZF73		959175 S-NPH3			1	1	1	1
959175	H-ZF73GT					1	1	1	1

Note:

*The "()" indicates a significant difference in parameters.

**Chemical Properties

The chemical stability is the ability of polished surface to resist erosive substance of sorts during the glass component being processed and afterwards being applied.

1. Resistance to Humidity RC(S) (Surface Method)

According to testing method of GB/T 7962.15-2010, the comparison of haze with H (BaK7), H(ZK9), the resistance of the polished glass surface to humidity, RC(S) is classified into 4 grades (Table 1):

Table 1

Grade (RC)	Haze Comparison	Note
1	$H \leq H$ (BaK7)	At 50°C and the relative humidity of 85%, the hydrolysis "spot" is not formed on the polished glass surface till 20 hours later
2	$H \leq H$ (BaK7)	At 50°C and the relative humidity of 85%, the hydrolysis "spot" is formed on the polished glass surface till 20 hours later
3	$H(ZK9) \geq H > H(BaK7)$	$H(ZK9) \geq H > H(BaK7)$, the resistance of the glass to humidity is classified into grade 3
4	$H > H(ZK9)$	$H > H(ZK9)$, the resistance of the glass to humidity is classified into grade 4



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2. Resistance to Acid RA(S) (Surface Method)

According to testing method of GB/T 7962.14-2010, resistance of the polished glass surface to acid, RA(S) is classified into 6 grades (Table 2):

Table 2

Grade (RA)	Testing solution	Testing time t	Note
1	PH=2.9 ethylic acid	t≥5h	No appearance of purplish blue interference color, mixed color or layer of erosion
2	PH=2.9 ethylic acid	30min≤t<5h	appearance of purplish blue interference color, but no appearance of mixed color or layer of erosion
3	PH=4.6 acetate	t≥30min	appearance of purplish blue interference color or mixed color, but no layer of erosion
4	PH=4.6 acetate	5min≤t<30min	appearance of purplish blue interference color or mixed color, but no layer of erosion
5	PH=6.0 distilled water	t>3h	appearance of purplish blue interference color or mixed color, but no layer of erosion
6	PH=6.0 distilled water	t≤3h	appearance of purplish blue interference color, mixed color or layer of erosion

3. Durability of Water DW (Powder Method)

The water durability can be measured by the method specified in GB/T 17129. Dw is calculated by the following formula:

$$D_w = \frac{B-C}{B-A} \times 100\%$$

Where: Dw: soaking-out percentage, %;

B: mass of filter and sample, g;

C: mass of filter and soaked sample, g;

A: mass of filter, g.

According to the calculation results, Dw is classified into 6 grades (Table 6):

4. Durability of Acid DA (Powder Method)

The acid durability can be measured by the method specified in GB/T 17129. DA is calculated by the following formula:

Table 3

Grade	1	2	3	4	5	6
Soaking-out percentage Dw	<0.04	0.04~0.10	0.10~0.25	0.25~0.60	0.60~1.10	>1.10

$$D_A = \frac{B-C}{B-A} \times 100\%$$

Where: DA: soaking-out percentage, %;

B: mass of filter and sample, g;

C: mass of filter and soaked sample, g;

A: mass of filter, g.

According to the calculation results, DA is classified into 6 grades (Table 4):

Table 4

Grade	1	2	3	4	5	6
Soaking-out percentage DA	<0.20	0.20~0.35	0.35~0.65	0.65~1.20	1.20~2.20	>2.20

5. Climatic Resistance (CR)

Testing samples are exposed to water vapor saturated atmosphere with relative humidity 90%, the temperature of which alternates between 40°C ~ 5 0°C per hour. The periodic change lasts for 15 times. The testing samples are removed from the climate chamber after 15 testing periods. The difference of haze before and after testing (ΔH) is used as a measure of CR classification.

Table 5 lists the climatic resistance grades.

Table 5

Grade	1	2	3	a	4 b	c
Increase in haze ΔH (%)	<0.3	0.3x~1.0	1.0~2.0	2.0~4.0	4.0~6.0	≥6.0

***reference: CDGM optical glass data-sheet