

Material	Range (cm ⁻¹)	Sensitive to humidity	Storage	Solubility (g/100g H ₂ O)	Hardness (Knoop)	Cleaning	Remark
AgBr	20000-285	Some	Dry Dark	0.0000135			Light-sensitive. Almost insoluble in water. Soft, easily scratched.
AgCl	17000-400	No	Dark	0.000193	9.5	Water or organic solvents	Light-sensitive, soft. Insoluble in water. Does not resist acids or ammonium chloride solutions. Corrosive.
BaF ₂	50000-770	Yes	Dry	0.17	82		As CaF ₂ . Sensitive to ammonium salts, thermal and mechanical shock. Does not fog.
CaF ₂ IRTRAN 3	48000-1050	No	-	0.0017	158 200	Water or organic solvents	Hard, more expensive than KBr or NaCl. Insoluble in water. Resists most acids and bases. Does NOT resist ammonium salts! Does not fog.
CdTe IRTRAN 6	12500-410	No	-	Insoluble	45		
CsI	33000-180	Yes	Dry	44.0			Does not resist water. Soft and easily scratched. Does not cleave. Slowly fogging.
Ge	5500-450 285-25	No	-	Insoluble	6.25 Moh		
Glas	34000-4000	No	-	Insoluble		Water or organic solvents	Only used in UV.
KBr	47000-385	Yes	Dry	53.5	5.9	Polishing	Relatively cheap. Does not resist water. Slightly softer than NaCl. Easily polished. Slowly fogging.
KCl	40000-500	Yes	Dry	34.7	7.0	Polishing	As NaCl but wider range, less soluble and less reflection.
LiF	60000-1800 50-	Some	Dry	0.27	110	Organic solvents	Hard, mostly used as filter.
MgF ₂ IRTRAN 1	10000-1380	Some	Dry	0.0076	575 (=6.0 Moh)		
MgO IRTRAN 5	25000-1280	Yes	Dry	Insoluble	640 (=6.5 Moh)		Absorbs CO ₂ and H ₂ O from air. Does not resist acids.
NaCl	48000-625	Yes	Dry	35.7	15.2	Polishing	Relatively cheap. Does not resist water. Easily polished and cleaved. Fogging slowly.
Polyetylen	625-10	No	-	Insoluble		Water or organic solvents	Used in FAR-IR, easily affected by chemicals, very cheap. Soft. Difficult to clean.
Si	-33	No	-	Insoluble	1150 (=7.0 Moh)	Water or organic solvents	Brittle. High refractive index.
SiO ₂ Kvarts	60000-2800 230-	No	-	Insoluble	741	Water or organic solvents	Insoluble in water. Does not resist HF-solutions or bases. Used mostly in UV and FAR-IR.
SrF ₂	-850	No	-	0.012		Water or organic solvents	As CaF ₂ . Does not resist ammonium salts. Very sensitive to thermal and mechanical shock. Does not fog.
TlBr+TlI KRS-5	16600-250	Yes	-	0.05	40.2	Organic solvents	Very expensive, very toxic, but excellent for ATR and MIR. Soluble in water and bases, not in acids. Soft.
ZnS IRTRAN 2 ISOTRAN 2	20000-715	No	-	Insoluble	355	Water or organic solvents	Expensive, resists strong acids and bases.
ZnSe IRTRAN 4	10000-515	No	-	Insoluble	150	Water or organic solvents	Expensive, high refractive index.