

Selenides

MATERIAL	FORMULA	STANDARD PURITIES, *	THEORETICAL DENSITY, G/cm ³	LISTED MELTING POINT, °C	FABRICATION METHOD	SUGGESTED APPLICATIONS
Bismuth selenide	Bi ₂ Se ₃	99 - 99.999	6.8	710	Hot-pressed	Multilayer thin film Magneto resistant film
Cadmium selenide	CdSe	99.999	5.8	1750	Hot-pressed	Photoconductive film
Indium selenide	In ₂ Se ₃	99.999	5.7	890	Hot-pressed	Semiconductors
Lead selenide	PbSe	99.999	7.82	1065	Hot-pressed	Photoconductive film
Molydenum selenide	MoSe ₂	99.9	6.9	Ca. 1150	Hot-pressed	Lubricant film
Niobium selenide	NbSe ₂	99.8	6.3	Ca. 780	Hot-pressed	Lubricant film, electrically conductive
Tantalum selenide	TaSe ₂	99.8	8.6	-----	Hot-pressed	Lubricant film
Tungsten selenide	WSe ₂	99.8	9.0	-----	Hot-pressed	Lubricant film
Zinc selenide	ZnSe	99.999	6.8	1526	Hot-pressed	Multilayers, Photoconductive & infrared films & filters

Sulfides

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Antimony sulfide	Sb ₂ S ₃	99.9	4.6	550	Hot-pressed	Infrared filter. High index material in red part of visible spectrum
Arsenic sulfide	As ₂ S ₃	99.9, 99.99, 99.999	3.2	210 softens	Hot-pressed	Adherent, stable, non-hygroscopic, anti-reflection films on Ge & Si
Cadmium sulfide	CdS	99.99	4.8	1750	Hot-pressed	Photoconductive film
Cadmium sulfoselenide	xCdS - yCdSe	99.99	varies	varies	Hot-pressed	Photoconductive film
Lead sulfide	PbS	99.9 99.999	7.5	Ca. 780	Hot-pressed	Metal, high reflecting film
Molydenum sulfide	MoS ₂	99	5.1	450 sub	Hot-pressed	Lubricant film on bearings & other moving parts
Niobium sulfide	NbS _{1.75}	99.8	4.6	-----	Hot-pressed	Lubricant film on bearings & other moving parts

Tantalum sulfide	TaS ₂	99	6.9	_____	Hot-pressed	Lubricant film on bearings & other moving parts
Tungsten sulfide	WS ₂	99.8	7.5	Ca. 427 dec.	Hot-pressed	Lubricant film on bearings & other moving parts
Zinc sulfide	ZnS	99.99	4.1	1830	Hot-pressed	Multalayers, high-index film for non-absorbing beam splitter