



Processable Materials

Here you will find the processing options for optical materials at LAYERTEC.

Material	Formula	Optical Processing	Ultrasonic Cleaning	Coating
Fused silica	SiO ₂	■	■	■
Boric-crown glass (e.g. N-BK7)		■	■	■
Nearly each optical glass		■	■	■
Ultra low expansion glass (ULE®,...)		■	■	■
Quartz-crystalline	SiO ₂	■	■	■
Fluorspar (calcium fluoride)	CaF ₂	■	■	■
Yttrium aluminium garnet (YAG)	Y ₃ Al ₅ O ₁₂	■	■	■
Glass ceramic (ZERODUR®,...)		■	■	■
Magnesium fluoride	MgF ₂	■	■	■
Sapphire	Al ₂ O ₃	■	■	■
Lumilass®		■	■	■
Ruby	Al ₂ O ₃ :Cr	■	■	■
Zinc sulfide	ZnS	■	■	■
Germanium	Ge	■	■	■
Lutetium aluminium garnet (LuAG)	Lu ₃ Al ₅ O ₁₂	■	■	■
Silicon	Si	■	■	■
Potassium titanyl phosphate (KTP)	KTiOPO ₄	■	■	■
Potassium yttrium tungsten (KYW)	KY(WO ₄) ₂	■	■	■
Terbium gallium garnet (TGG)	Tb ₃ Ga ₅ O ₁₂	■	■	■
Yttrium Calcium Oxoborate (YCOB)	YCa ₄ O(BO ₃) ₃	■	■	■
Yttrium lithium fluoride (YLF)	YLiF	■	■	■
Yttrium vanadate (YVO)	YVO ₄	■	■	■
Gadolinium gallium garnet (GGG)	Gd ₃ Ga ₅ O ₁₂	■	■	■
Gadolinium scandium gallium garnet (GS GG)	Gd ₃ Sc ₂ Ga ₃ O ₁₂	■	■	■
Gadolinium vanadate	GdVO ₄	■	■	■
Lutetium(III) oxide	Lu ₂ O ₃	■	■	■
Potassium gadolinium tungstate (KGW)	KGd(WO ₄) ₂	■	■	■
Lithium niobate	LiNbO ₃	■	■	■
Zinc germanium phosphide (ZGP)	ZnGeP ₂	■	■	■
Chrysoberyl (Alexandrite)	BeAl ₂ O ₄	■	■	■
Gallium arsenide	GaAs	■	■	■

■ standard process

■ depends on the requirements

■ not possible

date: 09/30/2019

Please see more materials on the next page.



Material	Formula	Optical Processing	Ultrasonic Cleaning	Coating
Potassium titanyl arsenate (KTA)	KTiOAsO ₄	■	■	■
Bismuth triborate (BiBO)	BiB ₃ O ₆	■	■	■
Cesium titanyl arsenate (CTA)	CsTiOAsO ₄	■	■	■
Yttrium Orthoaluminate (YALO / YAP)	YAlO ₃	■	■	■
Barium fluoride	BaF ₂	■	■	■
Calcium carbonate	CaCO ₃	■	■	■
Diamond	C	■	■	■
Fluorophosphate glass	Ba(PO ₃) ₂ /MgF ₂ / CaF ₂ / ...	■	■	■
Glassy carbon	C	■	■	■
Lanthanum magnesium hexaaluminate (LMA)	LaMgAl ₁₁ O ₁₉	■	■	■
Lanthanum Scandium borate (LSB)	LaSc ₃ (BO ₃) ₄	■	■	■
Lithium tantalate	LiTaO ₃	■	■	■
Lithium triborate (LBO)	LiB ₃ O ₅	■	■	■
Rubidium dihydrogen phosphate (RDP)	RbH ₂ PO ₄	■	■	■
Rubidium titanyl phosphate (RTP)	RbTiOPO ₄	■	■	■
Silicon carbide	SiC	■	■	■
Zinc selenide	ZnSe	■	■	■
Beta barium borate (BBO)	Ba(BO ₂) ₂	■	■	■
Lithium fluoride	LiF	■	■	■
Thallium bromide	TlBr	■	■	■

■ standard process

■ depends on the requirements

■ not possible

date: 09/30/2019