

# Optical material

Hontec optics has strong capability in fabricating optical components with various optical materials. The most important material properties to consider for an optical element are transmission versus wavelength, index of refraction, thermal characteristics, mechanical and chemical characteristics and cost. Many glass manufacturers offer the same material characteristics under different trade names. Based on availability, we reserve the right to substitute an equivalent glass in our production runs.

The materials that Hontec optics has ever used include:

Colorless Optical Glass: Guangming, Schott, Hoya, Ohara.

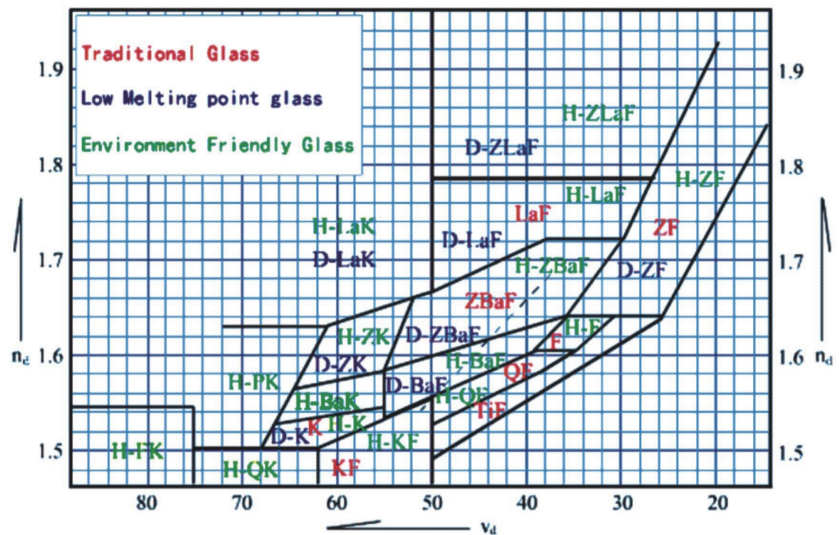
Special Glass: Fused silica, Colored glass, Pyrex, D263, BoroFloat, B270,...

Optical Crystal: Si, Ge, CaF<sub>2</sub>, MgF<sub>2</sub>, ZnSe, Quartz, Sapphire,...

Colored Glass: ZJB300, JB400, CB550, HB610, HWB780, QG21, LB12...

## Colorless Optical Glass

Name	Code
Flint crown	FK
Light crown	QK
Crown	K
Phosphate crown	PK
Barium crown	BaK
Dense crown	ZK
Lanthanum crown	LaK
Special crown	TK
Crown flint	KF
Light flint	QF
Flint	F
Barium	BaF
Dense barium	ZBaF
Dense flint	ZF
Lanthanum flint	LaF
Dense lanthanum flint	ZLaF
Titanium flint	TiF
Special flint	TF



Our optical glasses are classified by their main chemical components and are identified by refractive index ( $n_d$ ) and Abbe-number ( $V_d$ ). Primarily they can be divided into groups, and further they can be identified into various types. Each group has a name and a code, and each type of glass within some group is named by the abbreviated group symbol and an Arab number. We classified them into 18 groups according to their positions on  $n_d$ -  $V_d$  situation chart and their main chemical components.

