

Qualified Glass List

There are over 200 ‘moldable’ glass types ranging across the Abbe Diagram meeting almost every need of the optical designer. ‘Moldable’ glasses are glasses developed by the optical glass companies specifically for the precision glass molding process. These materials are engineered to optimize molding performance, reduce cycle times, extend mold life, and improve production consistency without compromising optical quality while keeping your costs low.

While glasses not specifically developed for molding can still be moldable, a glass designed with molding in mind is almost always a better decision. A common misconception is that moldable glasses are inherently softer or lower performing. While this may be true for certain compositions, there are many cases where a moldable formulation exhibits equal or even greater hardness and durability than its conventional counterpart, while still delivering comparable refractive and dispersion properties.

Hexagon Optics has qualified a wide range of optical glasses for precision aspheric lens molding and continues to regularly expand its portfolio of qualified glasses. In addition to a broad portfolio of moldable oxide glasses, we also support radiation-resistant glasses and chalcogenide materials for infrared systems.

Material selection is often one of the most critical design decisions in any optical system. If you need guidance navigating the options, our engineers are ready to help you select the optimal glass for your desired applications. Our team maintains an extensive library of glasses and when a new formulation is required, qualifying a material we have not previously molded is both fast and cost-effective, so please contact us if you have a specific need.

Glass	Manufacturer	n_d	V_d	ρ (g/cm ³)	T_g (°C)	α -30/+70°C
D-K9*	CDGM	1.51633	64.06	2.41	496	6.3
D-K59*	CDGM	1.51760	63.50	2.41	497	6.0
D-ZK2*	CDGM	1.58313	59.38	2.96	501	7.3
D-ZK3*	CDGM	1.58913	61.15	2.83	511	7.2
D-LAK6*	CDGM	1.69384	53.10	3.50	522	7.5
D-ZLaF52LA*	CDGM	1.81000	40.99	4.56	546	6.6
S-LAH60	Ohara	1.83400	37.16	4.43	612	5.6

*Preferred molding glass

