

ZINC SELENIDE (Regular grade) ZnSe CVD

Crystallographic ZnSe CVD (Zinc Selenide)

Syngony	Cubic
Symmetry Class	43m

Optical ZnSe CVD (Zinc Selenide)

Refractive Index at $n_{10.6}$	2.4028
Thermal Coefficient of Refractive Index at $l=10.6$ microns, $^{\circ}\text{C}^{-1}$	$6.1 \cdot 10^{-5}$
Transmission Range, microns (thickness 10MM)	0.55,20
Transmittance ZnSe CVD $t_i(l)$ vs. wavelength l	

Refractive Index n vs. wavelength l	
l, MKM	$n(l)$
0.58	2.6754
1.0	2.4892
3.0	2.4376
5.0	2.4295
7.0	2.4218
9.0	2.4122
10.6	2.4028
11.0	2.4001
13.0	2.3850
15.0	2.3623
17.0	2.3448

Thermal ZnSe CVD (Zinc Selenide)

Thermal Linear Expansion $\alpha_t, ^{\circ}\text{C}^{-1}$ at 27°C	$7.57 \cdot 10^{-6}$
Thermal Conductivity, $\text{W}/(\text{m} \cdot ^{\circ}\text{C})$ at 20°C	16
Specific Heat Capacity, $\text{J}/(\text{kg} \cdot ^{\circ}\text{C})$	339

Mechanical ZnSe CVD (Zinc Selenide)

Density, g/cm^3 at 20°C	5.27
Mohs Hardness	4
Poisson Ratio	0.28
Young Modulus (E), Pa	$7.03 \cdot 10^{10}$

Chemical ZnSe CVD (Zinc Selenide)

Solubility ZnSe CVD	
in water at 18°C $\text{g}/100\text{cm}^3$	in acids
insoluble	soluble

"Opto-Technological Laboratory" produces lenses, windows, prisms, wedges, ball lenses, cylindrical lenses and others optical components according to customers' specifications and drawings out of crystals zinc selenide CVD (ZnSe CVD).