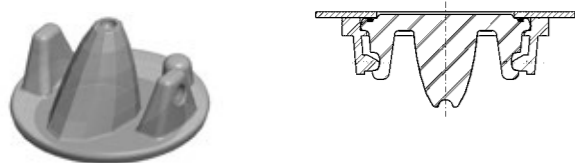


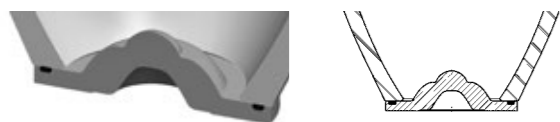
Assembly with SNAP IT®

- Intelligent solutions for every application
- Easy to assemble

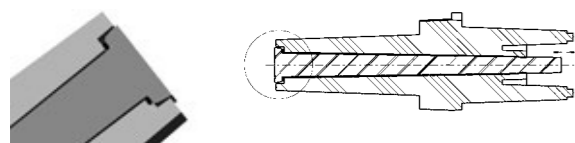
Mechanical



Glue



Combinations



Glue recommendation available on request

Food Safety

SUPRAX® 8488 conforms to the quality standards of the German LFGB, regulation (EC) No. 1935/2004 as well as FDA CPG 7117.06 and FDA CPG 7117.07.

RoHS compliant

Auer Lighting GmbH
Hildesheimer Straße 35
37581 Bad Gandersheim
Germany
T +49 (0) 5382 701-0
F +49 (0) 5382 701-451
info@auer-lighting.com
www.auer-lighting.com



SUPRAX® 8488 GLASS

THE PERFECT MATERIAL



PRVSM 035_01 0917 0.5 look/one Printed in Germany

Made of SUPRAX® Borosilicate Glass

Combining the advantage of SUPRAX® 8488 borosilicate glass featuring the excellent thermal and chemical resistance: Outstanding state-of-the-art glass pressing and tooling expertise make optically precise, customized products a reality for you.

Material Characteristics

Stable mechanical and optical properties:

- Operating temperatures -80 °C up to 400 °C
- Very low thermal expansion coefficient
- Fire resistant (not flammable)
- Excellent surface hardness
- Low dispersion reduces color artifacts
- Resistant against hydrocarbons
- No aging
- No outgassing
- No yellowing
- Recyclable

Applications

- Stage and Studio Lighting
- Projection Technologies
- Automotive Front Lighting
- Professional Lighting for In- and Outdoor
- White Goods Illumination
- Industrial applications like safety sight glasses and metering technologies

Electrical Properties

@ 50 Hz	Property	250 °C	350 °C
	Volume resistance ($\Omega \cdot \text{cm}$)	7.1	5.8
@ 1 MHz	Property	25 °C	
	Dielectric constant ϵ_r	5.4	
	Loss tangent $\tan \delta$	93	
@ 2.466 GHz	Property	20 °C	400 °C
	Dielectric constant ϵ'	5.1 ± 0.1	5.7 ± 0.1
	Dissipation factor ϵ''	0.050 ± 0.005	0.26 ± 0.03
	Loss tangent $\tan \delta$	0.010 ± 0.001	0.045 ± 0.004
	TEM half-value layer (mm)	610 ± 50	125 ± 10

Chemical Properties

Composition:

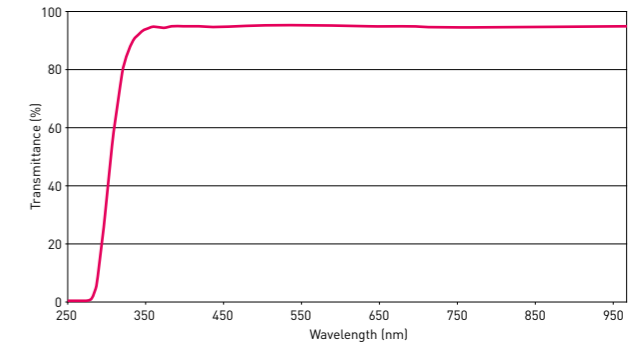
SiO₂ [76 %], B₂O₃ [12 %], Na₂O [6 %], Al₂O₃ [4 %], BaO [1 %], ZrO₂ [1 %]

	Hydrolytic resistance	Acid resistance	Alkaline resistance
Test acc. to	DIN ISO 720 Class1 (HGA1)	DIN ISO 1776	DIN ISO 695 Class A2
Max. abrasion	0.1	< 100 μg Na ₂ O/dm ²	> 75 – 175 mg/dm ²
Max. abrasion MAXOS®	0.050	< 60 μg Na ₂ O/dm ²	> 100 mg/dm ²

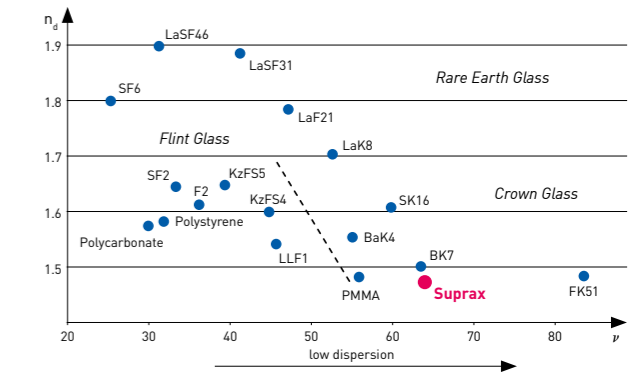
Physical Properties

Property	SUPRAX® 8488	Remarks
Density (g/cm ³)	2.31	@ 25 °C
Water absorption (weight %)	No	acc. to ISO 62
Thermal expansion coefficient (10 ⁻⁶ /K)	4.1	
Young's modulus E (10 ³ N/mm ²)	67	
Poisson's ratio μ	0.2	
Thermal conductivity λ (W/(m K))	1.20	@ 90 °C
Heat capacity (J/(g K))	0.80	@ 25 °C
Flammability	No	UL 94
Permanent operating temperature (°C)	400	
Thermal shock resistance ΔT (K)	130	
Transformation temperature T _g (°C)	545	
Light transmission (%)	92	D = 5 mm
Refractive index	1.482	n _d @ 25 °C
Thermo-optic coefficient dn/dT (10 ⁻⁴ /K)	~ 0	
Abbe number	65	ν
Yellowness index	0	30 years ASTM E313

Transmittance (D = 5 mm)



Refractive Index and Abbe Number



UV Stability

