

HEADLINES:

1. New transmission improved glass types N-SF6HT and N-SF57HT

SCHOTT is pleased to offer the well established high index and lead and arsenic free heavy flints N-SF6 and N-SF57 with improved transmission in the blue/violet spectral area in the quality step HT.

N-SF6HT and N-SF57HT have specifically been developed for use in digital projection and for use in industrial and consumer optics for imaging applications where high light efficiency in the blue area is a must.

http://www.schott.com/optics_devices/english/download/opticalglassdatasheetsv041004-b.xls

2. Tighter delivery tolerances for high index glass types

Delivery tolerances published in our last edited pocket catalog "Optical Glass" (Page 7, Version 1.5, 06/2003) have been up dated.

From the first of April 2005 on SCHOTT will deliver all optical glasses with n_d higher than 1,83 with tighter tolerances.

For all glasses for which n_d exceeds 1,83 the same tighter tolerance applies as for glasses with an n_d -value smaller/equals 1,83.

http://www.schott.com/optics_devices/english/news/press.html

3. New precision refractive index measurement with $\pm 4 \cdot 10^{-6}$ measurement accuracy.

With our new automated spectral goniometer, the **Ultraviolet to infrared Refractive Index measurement System (URIS)**, the refractive index of optical glasses can be measured to an accuracy of $\pm 4 \cdot 10^{-6}$. The measurement accuracy for the dispersion ($n_F - n_C$) is $\pm 2 \cdot 10^{-6}$. These measurement accuracies can be achieved independent of the glass type and over the complete wavelength range from 185 nm to 2325 nm. The measurement is based on the minimum angle of deviation principle. The samples are prism shaped with dimensions of about 35 x 35 x 25 mm³.

The standard measurements temperature is 22°C. The temperature can be varied between 18 to 28°C on request. The standard measurement atmosphere is air. On special request also nitrogen is possible. Every precision test certificates from now on will be based on URIS measurement results.

Due to the high accuracy of URIS from the UV to the IR region the old UV-IR and Super Precision Test Certificates VIS are obsolete. This results in a simplification of our measurement service.

More information on refractive index properties and measurement can be found in the technical information "TIE-29: Refractive index and dispersion":

http://www.schott.com/optics_devices/english/download/index.html

4. ZERODUR® K20: High-temperature stable glass ceramic with low thermal expansion coefficient.

The new ZERODUR® K20 glass ceramic exhibits a high temperature stability up to 850°C. The thermal expansion coefficient is low with only $2.0 \cdot 10^{-6} \text{ K}^{-1}$ between 20°C - 700°C and $1.5 \cdot 10^{-6} \text{ K}^{-1}$ at room temperature. This enables the combination of ZERODUR® K20 with other materials of similar low thermal expansion behaviour, e.g. Invar®- alloys. ZERODUR® K20 does not change during multiple temperature cycles and is therefore suitable e.g. as mould material in hot forming processes.

Further information can be found in our ZERODUR® K20 product brochure following the following link:

http://www.schott.com/optics_devices/english/download/index.html

5. EC-Directive RoHS - Lead and Cadmium containing Glasses

The EC-Directive RoHS prohibits selling electric and electronic equipment containing lead and cadmium within and to the EC from July 2006 on. In 2003 optical industry applied for an exemption for optical and colored glasses containing these elements.

In November 2004 the English consulting company ERA presented a study for the decision to the Technical Advisory Committee TAC of the EC. In December the TAC released a proposal for an amendment of the RoHS directive in favour of the exemption. The final decision and its publication by the EC are expected within the next two months.

More detailed information can be found in the SCHOTT Technical Information **No 34** RoHS Hazardous Substances in Optical Glass, which can be downloaded from:

http://www.schott.com/optics_devices/english/download/index.html

6. New optical glass filter catalog

The English version of the new optical glass filter catalog is available on the SCHOTT homepage now! The German edition will be available in June 2005 in the internet.

The printed catalogs will be distributed to our customers during the b.m. trade shows.

Details: http://www.schott.com/optics_devices/english/download/index.html

7. We invite you to visit us at following trade shows worldwide in 2005

We would like to welcome you at our booth to talk about our recent developments and technologies. We will exhibit our products for the whole range of optical applications.

Exhibition: Photonics CHINA
Booth No.: E12, Hall 1
Date: 30.05.- 01.06.2005
Location: Shanghai, P.R. China

Exhibition: OptoCom
Booth No.: A1031, Hall 1
Date: 08.06.- 11.06.2005
Location: Taiwan, P.R. China

Exhibition: LASER 2005
Booth No.: 410, Hall B2
Date: 13.06.- 16.06.2005
Location: Munich, Germany

Exhibition: InterOpto
Booth No.: . / .
Date: 13.07.-15.07.2005
Location: Tokyo, Japan

Exhibition: CIOE
Booth No.: . / .
Date: 06.09.-09.09.2005
Location: Shenzhen, P.R. China

More information about these trade shows you can find at:
http://www.schott.com/optics_devices/english/news/fairs.html

Greetings from Mainz

Your Optic for Devices-Team

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