

Gerresheimer high-quality glass tubing as an intermediary product

As one of the leading manufacturers in the world with tubing plants in Europe and the US, Gerresheimer produces borosilicate glass tubing of top hydrolytic quality in flint and amber.

To meet our customers' growing demand for top technological performance we use state-of-the-art furnace technologies guaranteeing a homogeneous melting process which is checked by modern control systems and regular chemical analysis.

Our product range includes glass types with different expansion coefficients (33 and 51). The following sizes are available:

- Diameter 3 – 150 mm
- Wall thickness 0.15 – 8 mm
- Length 1.0 – 3.5 m

For further information please contact our technical support team
for Europe/Asia via info-tubing-eu@gerresheimer.com or
for the Americas via info-tubing-us@gerresheimer.com

Tubular Glass Tubing

Gx-51 Flint Gx-51 Amber Gx-51 Cerium Gx-33

Tubular glass compositions

Chemical composition
(main components/approximate wt%)

SiO ₂	73	70	73	80
B ₂ O ₃	12	10	11	13
Al ₂ O ₃	7	6	6	3
Na ₂ O + K ₂ O	9	8	9	4
CaO + MgO	1	1	1	<0.1
BaO	–	2	–	–
Fe ₂ O ₃	–	1	–	–
TiO ₂	–	3	–	–
CeO ₂	–	–	1	–

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► Continued from page 1.2

Physical properties (typical values)

Thermal expansion 0-300°C (x10 ⁻⁷)	52	53	61	32
Softening point (°C)	780	765	740	825
Annealing point (°C)	560	545	565	565
Strain point (°C)	525	515	530	515
Density (g/cm ³)	2.34	2.38	2.41	2.23
USP extractable arsenic (ppm)	<0.01	<0.01	<0.01	<0.01

Hydrolytic properties

USP	Type I	Type I	Type I	Type I
EP	Type I	Type I	Type I	Type I
JP	Type I	Type I	Type I	Type I
ISO 720	Class HGA1	Class HGA1	Class HGA1	Class HGA1