

**QUARTZ LIGHTING GRADES**

IOTA® quartz is used for the production of all types of quartz lighting, including automotive xenon, halogen, HID, and UHP lamps. Manufacturers of quality quartz tubing prefer IOTA for its high chemical purity and superior fusion properties to maximize production yields. Lamps fabricated with IOTA quartz have high temperature stability, resistance to devitrification, excellent optical clarity and low airline content.

Unimin produces a full range of IOTA® quartz products for each lamp application, with low alkali IOTA 6 used for the most demanding high-end UHP lamps.

All IOTA® quartz grades are produced in ISO 9001 certified plants. Raw materials and services associated with the mining and manufacturing are additionally administered under QIP<sup>SM</sup>, a proprietary quality assurance system designed by Unimin specifically for its mining and mineral processing activities.

**IOTA® CHEMICAL ANALYSIS**

These Do Not Represent A Specification

|                 | Al | B      | Ca  | Cr    | Cu    | Fe  | K   | Li  | Mg   | Mn    | Na    | Ni    | P   | Ti  | Zn   |
|-----------------|----|--------|-----|-------|-------|-----|-----|-----|------|-------|-------|-------|-----|-----|------|
| <b>IOTA 6</b>   | 8  | < 0.05 | 0.7 | 0.003 | 0.001 | 0.2 | 0.1 | 0.2 | 0.07 | 0.008 | < 0.1 | 0.002 | 0.1 | 1.4 | 0.01 |
| <b>IOTA STD</b> | 14 | < 0.10 | 0.6 | 0.006 | 0.028 | 0.3 | 0.7 | 0.5 | 0.04 | 0.039 | 1.0   | 0.001 | 0.1 | 1.2 | 0.01 |
| <b>IOTA CG</b>  | 14 | < 0.10 | 0.6 | 0.007 | 0.019 | 0.3 | 0.7 | 0.5 | 0.04 | 0.029 | 1.0   | 0.001 | 0.1 | 1.2 | 0.01 |

Typical Values (ppm)

Shipping Point: SPRUCE PINE, North Carolina, USA

**FOR ADDITIONAL INFORMATION:**

[www.IOTAinquiries@unimin.com](mailto:www.IOTAinquiries@unimin.com)



**PERFORMANCE DISCLOSURE:** While the above-information is believed to be accurate, the user's results may vary as site-specific conditions and applications are different and unique. It is the responsibility of the user to investigate and understand all sources of information affecting Unimin product performance; to comply with all laws and procedures applicable to the safe handling and use of Unimin products; and to determine the suitability and performance characteristics of Unimin's products for user's intended use. All products supplied by Unimin Corporation are subject to Unimin's terms and conditions of sale.

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**HEALTH HAZARD WARNING:** Prolonged inhalation of dust associated with the materials described in this data sheet can cause delayed lung injury including Silicosis, a progressive, disabling and sometimes fatal lung disease. IARC and NTP have determined that crystalline silica can cause lung cancer in humans. Risk of injury is dependent on the duration and level of exposure. Follow OSHA or other relevant safety and health standards for the form of crystalline silica called Quartz. Current safety data sheet, containing safety information, is available and should be consulted before usage.