

# Y2O3 99.99% 1.0-3.0mm 500g - 0700996-00500G

## Specifications

|                                                  |               |
|--------------------------------------------------|---------------|
| Coating material                                 | Yttrium oxide |
| Purity                                           | 99.99%        |
| Form                                             | Tablet        |
| Dimensions                                       | 1.0 - 3.0 mm  |
| Quantity                                         | 500 g         |
| Theoretical density at 20°C in g/cm <sup>3</sup> | 5.0           |
| Melting point in °C                              | 2410          |

## Temperature at vapor pressure

|                             |           |
|-----------------------------|-----------|
| 10 <sup>-2</sup> mbar in °C | ~ 2300    |
| 10 <sup>-1</sup> mbar in °C | ~ 2700    |
| Boiling point in °C         | 4300-4440 |

## Type of evaporation

|             |          |
|-------------|----------|
| Melting     | Possible |
| Sublimation | Possible |

## Evaporation source (typically)

### E-gun

#### Liner material

|   |      |
|---|------|
| W | Good |
|---|------|

### Boat

#### Boat material

|    |          |
|----|----------|
| W  | Possible |
| Mo | Good     |

## Specific evaporation conditions

|                                    |          |
|------------------------------------|----------|
| Preparation of base melt (premelt) | Possible |
| Reactive gas pressure              | Good     |

## Substrate temperature range

|              |      |
|--------------|------|
| 100 - 200 °C | Good |
| 200 - 300 °C | Good |

## Film transparency

|      |        |
|------|--------|
| Low  | < 0.25 |
| High | 10-12  |

## Film refractive index n / extinction coefficient k

|              |           |
|--------------|-----------|
| at 550 nm: n | 1.78-1.87 |
|--------------|-----------|