

Single Crystal Diffractometer Alignment Standard - Ruby Spheres

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|-----------------|-----------------------------------|
| Art. ID | NIST-1990 |
| Unit | 3 spheres |
| Deliverydetails | No Dangerous Good /not restricted |

Description

Standard Reference Material (SRM®) 1990 is intended primarily for use as an alignment standard for single crystal diffractometry. One unit consists of three chromium-doped single crystal aluminum oxide (ruby) spheres. The spheres are nominally 152 mm in diameter with 1.3 mm sphericity. The spherical geometry was chosen to facilitate alignment and to avoid corrections for absorption. These spheres produce reflections at high angles for copper and molybdenum radiation. The space group is R3c. Certified lattice parameters of NIST-1990 at 25 °C are: /// Sample value(s) - please ask for current certificate.

| Text/Information | Analyte/Parameter | CAS number | Concentration/Value | Unit | Method | Source |
|------------------|-------------------|------------|---------------------|------|--------|--------|
| a | Lattice parameter | | 0,476080 ± 0,000029 | nm | | |
| c | Lattice parameter | | 1,299568 ± 0,000087 | nm | | |