

Grades of Sapphire

Optical Grades (1 - 4)

Grade 1	Inclusions, block marks, twins, micro-bubbles and dispersal centers are non-existent.
Grade 2	Inclusions, block marks and twins are non-existent. Some dispersal centers are admitted (micro-bubbles up to 10 microns).
Grade 3	Inclusions, block marks and twins are non-existent. Uniformly distributed bubbles by size; not larger than 50 microns and not closer than 500 microns are admitted.
Grade 4	Inclusions, block marks and twins are non-existent. Bubbles with total diameter not larger than 200 microns and not closer than 20mm are admitted.

Technical Grade

Grade 5	Inclusions, block marks and twins are non-existent. Uniformly distributed bubbles by size; less than 50 microns and not closer than 500 microns. Also, bubble concentration not larger than 500 microns and not closed than 20 mm are admitted.
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Industrial Grade

Grade 6	Inclusions, block marks and twins are non-existent. Bubbles not larger than 50 microns with a total diameter less than 200 microns and not closer than 20 mm are admitted.
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Mechanical Grade

Grade 7	Holes, cracks, and edge chips are non-existent. Bubbles, inclusions, twins, and dispersal centers are admitted.
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