

PREMIUM GRANULAR SULPHUR SPECIFICATION

Sulphur Development Institute of Canada

(SUDIC)

Property:	Premium Product Specification:
Shape and Size	Generally spherical between 2mm and 6mm
Size Distribution	Less than 5% to be retained on a No. 1/4 U.S. screen (6.3 mm) Minimum of 75% to pass through a No. 3-1/2 U.S. screen (5.6 mm) Minimum of 75% to be retained on a No. 7 U.S. screen (2.80 mm) Less than 2% to pass through a No. 16 U.S. screen (1.18 mm) Less than 0.5% to pass through a No. 50 U.S. screen (300 µm)
Moisture Content	Less than 0.5% by weight moisture (bulk average) as produced
Friability Performance	Less than 1% of fines (50 mesh material) generated under standard Stress Level I friability test. Less than 2% fines generated under standard Stress Level II test.
Bulk Density	Not less than 1,040 kg/m ³ loose, 1,200 kg/m ³ agitated (vibrated)
Compaction	Fines, generated after direct shear test under static loading of 165 kPa (approximately 15 meters stockpile) not to exceed 0.2% fines by weight. Fines generated after direct shear test under dynamic loading at 165 Kpa not to exceed 0.5% fines by weight.
Angle of Repose	Not less than 25°
Other	Chemical composition must not be altered from the Feedstock Chemical Composition, except for moisture and entrained gases.

PREMIUM PRODUCT

The SUDIC Premium Product specifications introduced in the late 1970s were likely the most significant step forward in the long struggle to improve the properties of formed solid elemental sulfur and to meet the ever more stringent demands for a more environmentally safe and friendly product.