



Sierra Rutile

Standard Grade Rutile (SGR)

GENERAL SPECIFICATION

CHEMICAL ANALYSES

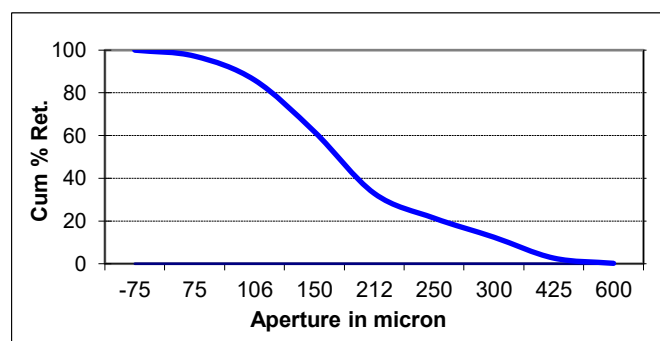
TiO₂	Guaranteed	95.0	min
	Typical	95.0	- 96.0
Fe₂O₃	Typical	0.6	- 1.20
ZrO₂	Typical	0.8	- 1.25
Al₂O₃	Typical	0.15	- 0.40
CaO	Typical	0.01	- 0.03
Cr₂O₃	Typical	0.20	- 0.25
MgO	Typical	0.01	- 0.04
MnO	Typical	0.01	- 0.02
Nb₂O₅	Typical	0.10	- 0.17
P₂O₅	Typical	0.02	- 0.06
S	Typical	0.10	- 0.50
SiO₂	Typical	0.7	- 1.10
Th (ppm)	Typical	40	- 110
U (ppm)	Typical	15	- 25
V₂O₅	Typical	0.6	- 0.8
Moisture	Typical	0.01	- 0.03

TiO₂ on a "dry" basis, all other analyses "as received"

SIZE DISTRIBUTION

Sieves from British Standard BS410:1986 and American Standard ASTM E-11-81			
Mesh No	Sieve Aperture (µm)	% Retained	
		Typical	Range
30	600	0	0 - 2
40	425	3	2 - 6
50	300	9	7 - 15
60	250	9	7 - 11
70	212	9	8 - 14
100	150	27	25 - 32
140	106	25	22 - 28
200	75	14	7 - 15
-200	-75	3.5	3.0 - 5

Typical D50: 155 - 190 µm



TYPICAL PHYSICAL PROPERTIES

(Data from mineralogy and chemistry text books denoted with *)

Specific gravity*	4.2 - 4.3
Bulk density (kg/m ³)	2300 - 2500
Angle of repose (°)	30

OTHER INFORMATION

Please contact your representative for the Material Safety Data Sheet

SGR is produced at Sierra Rutile Limited's operations in Sierra Leone.

SGR is a natural product and as such slight variations in the chemical analysis and size distribution should be expected.

This specification supersedes any former publication and is subject to change without notice. The technical advice contained herein is based on tests believed to be reliable and is offered as a helpful suggestion, it being expressly understood that all such advice being given and accepted at buyer's risk. This information is not a licence to operate under, nor intended to suggest infringement of any existing patents.

ISSUED: Jan-2026

ISSUE No: 5