

## Product Specification

**Product**      **White Sapphire Matte™**  
Aluminium Oxide

<b>Product Code</b>	50029
<b>Pack size</b>	20kg

**Shelf life**      5 years in unopened containers stored in a cool, dry area.  
Re-test if material is kept beyond the recommended shelf life.

Test	Specification	Method
Identity	Hexagonal	Microscope
Appearance	White powder	Visual
Form	Free flowing powder	Visual
Whiteness Index	Min: 85.0	CIE Index
Loss on Drying, %	Max 0.50	3 hr at 160°C
pH Value	5.0 – 8.0	ISO 787-9
Particle size distribution, µm	D <sub>10</sub> 2.50 – 6.50 D <sub>50</sub> 6.00 – 10.50 D <sub>90</sub> 11.50 – 20.00	Laser light scattering
Particle size (% less than 15 µm)	≥ 80.0	Laser light scattering

### Chemical Specification:

Arsenic (As), ppm	≤ 3	ICP-MS
Barium (Ba), ppm	≤ 700	ICP-MS
Cadmium (Cd), ppm	≤ 2	ICP-MS
Copper (Cu), ppm	≤ 300	ICP-MS
Mercury (Hg), ppm	≤ 3	ICP-MS
Lead (Pb), ppm	≤ 5	ICP-MS
Antimony (Sb), ppm	≤ 90	ICP-MS
Cobalt (Co), ppm	≤ 35	ICP-MS
Selenium (Se), ppm	≤ 80	ICP-MS

<b>Microbiological Specification:</b>		<b>Method</b>
Microbial Purity (total viable aerobic count)	≤ 100 CFU/g	BP
Gram negative bacteria	absent in 1 g	BP
<i>E. coli</i>	absent in 1 g	BP
<i>Pseudomonas aeruginosa</i>	absent in 1 g	BP
<i>Staphylococcus aureus</i>	absent in 1 g	BP
<i>Salmonella</i> species	absent in 10 g	BP
<i>Candida albicans</i>	absent in 1 g	BP

Effective from 28MAY2025

Latest revision supersedes previous document revisions

Approved by Vandana Chaudhary

## Revision Record

<b>Revision No.</b>	<b>Effective Date</b>	<b>Prepared By</b>	<b>Description of Changes</b>	<b>Affected Pages</b>
R0	14 Jan 2015	Amy Chang	Formerly S3.1-C2	All
R1	14 Sep 2015	Amy Chang	Updated rounding of figures	All
R2	20 Jan 2018	Andrea Whatley-Dale	Updated particle size distribution D <sub>50</sub> specification from minimum 7.0 to minimum 6.0	1
R3	12 May 2020	Louai Al-Obaidi	Updated particle size distribution D <sub>10</sub> specification from 3.0 – 6.0 to 3.5 – 6.5 and D <sub>90</sub> specification minimum from not defined to 11.5.(CRR063)	1
R4	02SEP2020	Tam Nguyen	Updated WI specification from 88 to 85. (CCR069)	1
R5	09NOV2022	Tam Nguyen	Updated Logo	All
R6	14JAN2025	Zoe Garson	Updated to Brisbane & White Sapphire Alusion	All
R7	23APR2025	Kelly O'Rourke	Updated product name to 'White Sapphire Matte' and updated particle size distribution D <sub>10</sub> specification from 3.50 – 6.50 to 2.50 – 6.50	1
R8	28MAY2025	Vandana Chaudhary	Update in chemical specification of Heavy metals as per 149	1