



## KAOLINS FOR SPECIALITY APPLICATIONS

## TYPICAL DATA

TEST	UNITS	OPAL ALPHA	OPAL BETA	OPAL SIGMA	OPAL GAMMA	OPAL FINISH	OPAL ZETA	OPAL EPSILON
<b>MOISTURE</b>	%	2.0 max	2.0 max	2.0 max	2.0 max	2.0 max	2.5 max	2.0 max
<b>ISO OPTICAL PROPERTIES</b>	R457 Brightness %	83.5	82.0 min	81.5	81.0	81.0	81.0	78.0
	Yellowness %	5.7 max	5.7 max	5.25	6.2 max	6.2 max	6.2 max	7.0 max
<b>PARTICLE SIZE DISTRIBUTION (Sedigraph)</b>	+53µm %	0.02 max	0.05 max	0.02 max	0.05 max	0.05 max	0.05 max	0.10 max
	+10µm %	2	6	4	6	6	6	20 max
	-2µm %	70	48	60	48	48	48	35
<b>VISCOSITY CONCENTRATION</b>	%	68 ± 4	68 ± 3	55 min	68 ± 3	63 ± 2	N/A	N/A
<b>SURFACE AREA</b>	m <sup>2</sup> /g	10	8	9	8	8	8	7
<b>OIL ABSORPTION</b>	g/100g	47	41	45	41	41	41	25 max
<b>pH</b>	-	5.0	5.0	5.0	5.0	5.0	5.0	5.0
<b>CHEMICAL ANALYSIS % (XRF)</b>	SiO <sub>2</sub>	48.60	47.10	48.60	47.10	48.60	49.40	47.10
	Al <sub>2</sub> O <sub>3</sub>	36.00	37.50	36.00	37.50	35.70	35.40	37.50
	Fe <sub>2</sub> O <sub>3</sub>	0.80	0.80	0.80	0.80	0.80	0.69	0.80
	TiO <sub>2</sub>	0.02	0.04	0.02	0.04	0.04	0.04	0.04
	CaO	0.10	0.02	0.10	0.02	0.12	0.14	0.02
	MgO	0.30	0.20	0.30	0.20	0.30	0.34	0.20
	K <sub>2</sub> O	2.80	2.30	2.80	2.30	2.90	3.20	2.30
	Na <sub>2</sub> O	0.05	0.07	0.05	0.07	0.07	0.10	0.07
LOI	11.23	12.00	11.23	12.00	11.50	11.00	12.00	
<b>MINERALOGICAL COMPOSITION % (XRD)</b>	Kaolinite	88	86	81	86	85	80	78
	Mica	8	10	13	10	10	14	15
	Felspar	2	2	3	2	2	3	5
	Quartz	1	1	1	1	1	1	1
	Smectite	1	1	2	1	2	2	1

A SUMMARY OF TEST PROCEDURES SHOWN OVERLEAF

Goonvean Ltd. was the first china clay company in the UK to be awarded the Certificate ISO 9001. The Company was founded in 1931 and in that time has established a strong reputation for the supply of high quality kaolins. Our products are used by major producers of pharmaceuticals, paints, plastics and rubber throughout the world, where quality and service are essential.

#### Product Form and Packing

Products are sold in powder form in 25 kg sacks, 1 tonne bags or bulk tankers.

Pallets and spin-wrapping are available on request.

Storage As a general guide, 1000kg of kaolin will occupy:-  
Powder in sacks – 1.7 cu metres

#### Summary of Laboratory Test Procedures (available on request)

ISO Optical Properties R457 % : Measurement of reflected light at 475 nanometres using a Carl Zeiss Elrepho Spectrophotometer.

Yellowness % : Measurement of light reflected at 570 nanometres minus light reflected at 457 nm.

Surface Area Nitrogen adsorption of dry powder.

Oil Absorption Grams of oil absorbed per 100 grams dry clay.

pH Measured by standard pH meter using a 10% w/v suspension.

Chemical Analysis SiO<sub>2</sub>  
Al<sub>2</sub>O<sub>3</sub>  
Fe<sub>2</sub>O<sub>3</sub>  
TiO<sub>2</sub> XRF.  
CaO  
MgO  
K<sub>2</sub>O  
Na<sub>2</sub>O

Particle Size +53µm % Particles retained on BSS 300 mesh  
+10µm % )  
-2µm % ) Sedigraph – measured on a 5% w/v fully deflocculated suspension.

Viscosity Concentration % by weight of kaolin in an aqueous slurry that has a viscosity of 5 poise. Measured using a Brookfield Viscometer.

Mineralogical Composition Kaolinite %  
Mica %  
Felspar % XRD.  
Quartz %  
Smectite %

Data The data quoted are determined by the use of Goonvean Standard Laboratory Test Procedures. Whilst every effort is taken to ensure the accuracy of technical information, the contents of this publication are not intended to constitute, or to be construed as product specification.

Conditions of Sale Sales are in accordance with our “Conditions of Sale”, copies of which will be supplied upon request.

Further Information Should you require any further information or advice on our products, please contact us at the address given below.

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