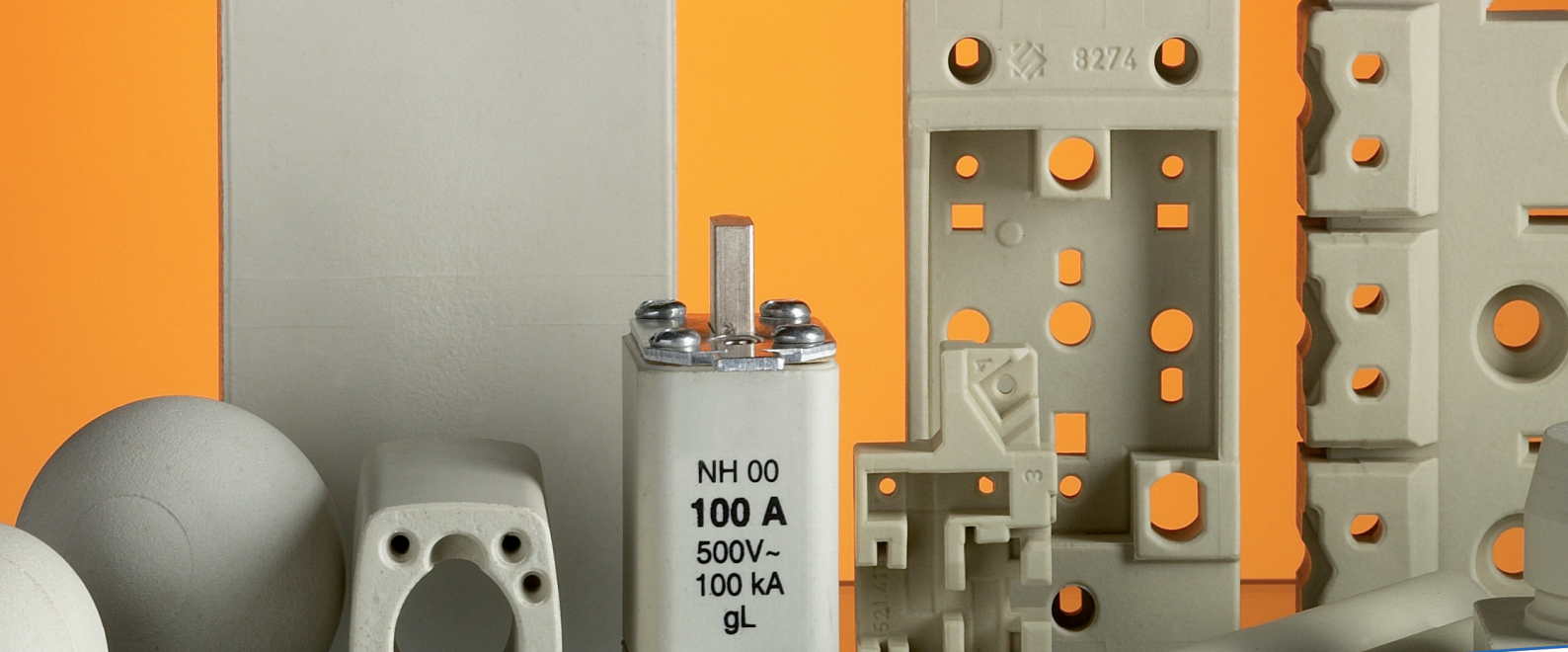


Mineral Solutions for Technical Ceramics

Imerys Ceramics, your partner for performing Technical Ceramics solutions

Imerys Ceramics uses its unrivalled product portfolio, commercial and technical expertise to offer cost effective and long term solutions to Technical Ceramics manufacturers.

Imerys Ceramics' portfolio for Technical Ceramics includes:

- technical & alumina porcelain bodies
- steatite bodies
- cordierite bodies
- alumina bodies
- industrial minerals

Our bodies are perfectly suitable for highly complex shapes and lead to DIN standards specifications.

IMERYS Ceramics

World leader in mineral solutions for ceramic manufacturers
Americas • Asia-Pacific • Europe

VALUE-ADDED PRODUCTS

From its mineral processing and bodies plants, Imerys Ceramics has engineered industrial solutions for Technical Ceramics. Imerys Ceramics' products cover the specific technical requirements of Technical Ceramics customers involved in technical porcelains, steatites, cordierites, mullites and alumina ceramics.

From electrical fittings, thermal applications, automotive, aerospace, military and medical products, we provide stable solutions. All our references are designed to fulfill the DIN 40685 norm.

The right bodies for your final pieces

We deliver prepared bodies to our Technical Ceramics customers from two allocated production factories based in Germany and France. Our equipments for technical ceramic bodies preparation include:

- dry/wet mixers and grinders: alumina ball-mills, attritors ...
- filter presses: normal and isostatic
- alumina covered de-aired pug-roll machines
- spray dryers: nozzles, bi-fluid nozzles and rotating disc
- particle size classifiers

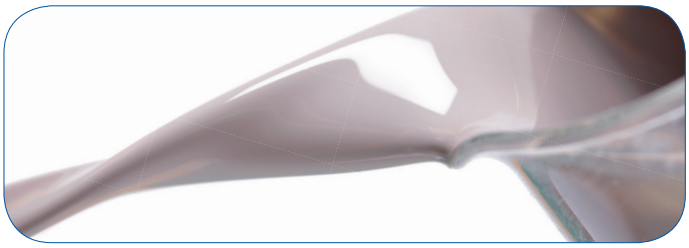
Standard prepared bodies

For years we have been supplying standard, typical and consistent technical ceramic preparations to customers worldwide. Our prepared bodies portfolio includes standard technical porcelains, steatites, cordierites, and alumina bodies. With these trustworthy solutions, our customers benefit from:

- continuous supply reliability
- quality consistency
- production flexibility
- cost maintenance
- high production yield

Tailor-made prepared bodies

We have dedicated technical sales representatives, R&D experts and production structures enabling us to develop tailor-made solutions answering customers' specific requests.



The right minerals for your bodies

Thanks to a broad portfolio of mineral resources and processing plants all over the world, Imerys Ceramics has developed a full range of minerals suitable for each Technical Ceramics body type. Each mineral specificity plays a crucial part in the performance of Technical Ceramics final pieces.

Ball clays

With their inherent characteristics and according to the type of Technical Ceramics to be produced, our ball clays provide:

- high plasticity and unfired modulus of rupture to allow the shaping of complex items reducing breakage
- low values in silica to reduce the forming of cristobalite
- low values in alkali to avoid a chemical digestion of the cordierite phase
- low values in Al_2O_3 to help the forming of the steatite phase
- high values in Al_2O_3 to help the forming of cordierite phase

Kaolins

From deposits in the UK, Brazil and New Zealand, Imerys selected kaolins hold:

- low free quartz particles
- low to extremely low values in alkali to avoid a chemical digestion of the cordierite phase
- low to extremely low values in alkali to decrease flux phase in alumina bodies
- suitable particle size to optimize particle packing

Talcs

World leader in talc processing for Technical Ceramics, Imerys Ceramics' talcs have:

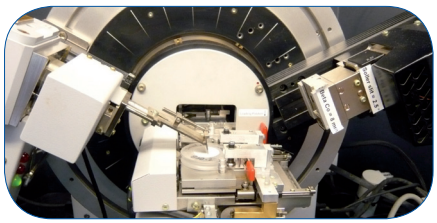
- microcrystalline structure and low values in Al_2O_3 to develop very high steatite dielectrical properties
- low values in CaO to reduce deformation for steatite
- high values in Al_2O_3 to build the cordierite phase
- high values in Al_2O_3 and interesting flux effect to limit the growth of corundum grains sizes in alumina bodies

Chamottes

For cordierites, with their low magnetic content, our chamottes provide:

- low firing shrinkage
- low coefficient of thermal expansion
- improved casting properties

FULL EXPERTISE



Thanks to a comprehensive understanding of the challenges faced by Technical Ceramics producers, Imerys Ceramics constantly strives to supply the highest level of products and services:

- selected product portfolio
- global sales network ensuring local customer support
- minerals, formulation and technical expertise
- technology centres in France, Germany, Thailand and the UK

At our Imerys Ceramics Technologies Centres in Europe, our activities also include developing cost effective and innovative solutions. Adapted to Technical Ceramics producers' requirements, our formulations address:

- substitution of existing minerals in existing specific customer formulations
- prepared bodies developments suited for a specific application

The 30 PhDs, engineers and technicians working at Imerys Ceramic Centre, located in the Limoges ceramic development cluster, are fully equipped with the most recent laboratory machines to conduct research on new application developments.

TAILORED SERVICES

The partnerships we develop with our clients enable them to be market leaders in their industries.
Thanks to our pilot plants, we are able to provide little scale production samples to test and validate the development batches. All customer development partnerships are subject to confidential agreements.

Technical Ceramics manufacturers rely on Imerys Ceramics' spectrum of products and expertise to be leaders on their markets. With the flexibility of our production facilities and the support of dedicated R&D teams, Imerys Ceramics successfully contributes to the development of its customers' strategies.

Industrial ignitors manufacturer's success story

A leading European manufacturer of industrial ignitors approached Imerys Ceramics in 2008 for assistance in reducing its level of production losses. After the evaluation of the raw materials used and the manufacturing process, **Imerys Ceramics** R&D engineers improved the body formulation (minerals and organical substances).

The reformulation advantages brought to this company:

- **production cost savings**: less production distortions and lower losses
- **higher production flexibility**

The management decided then to switch from its own preparation to out-sourced **Imerys Ceramics** tailor-made prepared body.

PORCELAIN BODIES

USE			Electrical engineering as a good insulator				
INTERNATIONAL NORM GROUP			C110	C111	C120	C130	
			Siliceous porcelain plastic-processed	Siliceous porcelain pressed	Aluminous porcelain	Aluminous porcelain high strengh	
PRODUCT REFERENCE			PM905B	PP935B	AM006B	AM007B	AP007B
FORMING PROCESS			Wet pressing Extruding	Dry pressing	Wet pressing Extruding	Wet pressing Extruding	Dry pressing
FIRING COLOUR			White	White	White	White	White
		Units					
FIRING TEMPERATURE		°C	1360-1420	1380-1420	1310-1340	1310-1340	1310-1340
SHRINKAGE TO MOULD DIMENSIONS		%	14,4 (± 0,5)	11,0 (± 0,5)	9,2 (± 0,5)	8,8 (± 0,5)	9,5 (± 0,5)
PHYSICAL PROPERTIES	Fired M.O.R.	MPa	67	64	110	160	160
	Coefficient of thermal expansion (20 - 600°C)	10^{-7} K^{-1}	48	48	65	68	68
	Fired density (typical)	$g.cm^{-3}$	2,41	2,41	2,53	2,78	2,78
	Open porosity	vol %	0,0	0,0	0,0	0,0	0,0
FIRED CHEMICAL ANALYSIS	SiO_2	mass %	68,6	67,8	46,2	34,1	34,1
	Al_2O_3		26,0	27,0	47,1	59,9	59,9
	Fe_2O_3		0,45	0,51	0,61	0,58	0,58
	TiO_2		0,14	0,10	0,29	0,28	0,28
	MgO		0,18	0,19	0,52	0,56	0,56
	CaO		0,13	0,07	0,24	0,31	0,31
	Na_2O		0,21	0,23	0,69	1,21	1,21
	K_2O		3,98	3,71	3,94	2,72	2,72
	L. O. I.		7,10	7,95	4,82	5,22	5,22
STANDARD PRESENTATION	Form of delivery	-	Spray-dried powder	Spray-dried powder	Spray-dried powder	Spray-dried powder	Spray-dried powder
	Bulk density (typical)	$kg.m^{-3}$	900	850	910	1020	980
	Moisture content (spray dried)	mass %	3 (± 0,5)	3 (± 0,5)	3 (± 0,5)	3 (± 0,5)	3 (± 0,5)
	Packaging	-	1000 kg big-bags 25 kg bags on pallets	1000 kg big-bags 25 kg bags on pallets	1000 kg big-bags 25 kg bags on pallets	1000 kg big-bags 25 kg bags on pallets	1000 kg big-bags 25 kg bags on pallets

STEATITE BODIES

USE			Heat & electrical engineering for manufacturing sockets, control housings, insulating beads, low-voltage power fuses and base plates ...		
INTERNATIONAL NORM GROUP			C220	C221	
			Steatite normal	Steatite low loss	
PRODUCT REFERENCE			SP720G	SP724K	SP727K
FORMING PROCESS			Dry pressing	Dry pressing	Dry pressing
FIRING COLOUR			Cream	Cream	Cream
		Units			
FIRING TEMPERATURE		°C	1260-1320	1300-1340	1300-1320
SHRINKAGE TO MOULD DIMENSIONS		%	10,0 (± 0,5)	13,0 (± 1,0)	10,5 (± 0,5)
PHYSICAL PROPERTIES	Fired M.O.R.	MPa	135	150	> 140
	Coefficient thermal expansion (20 - 600°C)	10^{-7} K^{-1}	81	74	79
	Fired density (typical)	$g.cm^{-3}$	> 2,7	> 2,7	2,81
	Open porosity	vol %	0,0	0,0	0,0
FIRED CHEMICAL ANALISIS	SiO_2	mass %	61,2	56,7	60,8
	Al_2O_3		4,7	3,0	3,5
	Fe_2O_3		1,40	1,10	1,02
	TiO_2		0,31	0,18	0,27
	MgO		24,0	24,1	28,1
	CaO		0,30	0,60	0,40
	Na_2O		0,10	0,10	0,26
	K_2O		0,80	0,15	-
	ZrO_2		7,00	9,20	-
	BaO		-	5,00	5,30
	L. O. I.		5,30	5,40	7,00
STANDARD PRESENTATION	Form of delivery	-	Spray-dried powder	Spray-dried powder	Spray-dried powder
	Bulk density (typical)	$kg.m^{-3}$	1040	1020	880-1020
	Moisture content (spray dried)	mass %	2,7 (± 0,5)	1,8 (± 0,5)	1,7 (± 0,5)
	Packaging	-	1000 kg big-bags 25 kg bags on pallets	1000 kg big-bags 25 kg bags on pallets	1000 kg big-bags 25 kg bags on pallets

Depending on minimum volumes, we can adjust for any specific customer needs: moisture, bulk density and organic binders for all bodies / packaging and form of delivery for extrusion bodies.

USE			Heat engineering for manufacturing supports of heating elements, parts of water heaters, pipes of heating element, gas heater inserts, spark protectors and catalyst carriers ...						
INTERNATIONAL NORM GROUP			C410	C511					C530
			Dense cordierite	Porous magnesium-aluminosilicate based					Porous alumino-silicate based
PRODUCT REFERENCE			CP889G	CP800M	CP808M	CP813M	CF820G	CP823M	CP856M
FORMING PROCESS			Dry pressing	Wet pressing Extruding	Wet pressing Extruding	Dry pressing	Wet pressing Extruding	Wet pressing Extruding	Dry pressing
FIRING COLOUR			White grey	Brown	Light brown	Dark brown	Grey	Olive brown	Light brown
		Units							
FIRING TEMPERATURE		°C	1280 - 1360	1280 - 1320	1220 - 1280	1280 - 1320	1280 - 1330	1300 - 1340	1280 - 1330
SHRINKAGE TO MOULD DIMENSIONS		%	9,7 (± 0,5)	6,5 (± 0,5)	9,7 (± 0,5)	5,8 (± 0,5)	5,5 (± 1,0)	6,0 (± 0,5)	5,8 (± 0,4)
PHYSICAL PROPERTIES	**Fired M.O.R.**	MPa	100	30	40	52	50	55	50
	Coefficient thermal expansion (20 - 600°C)	10^{-7} K^{-1}	37	44	41	34	28	31	35
	Fired density (typical)	$g.cm^{-3}$	> 2,1	Porous	Porous	Porous	Porous	Porous	Porous
	Open porosity	vol %	< 0,5	< 20,0	< 20,0	< 20,0	< 20,0	< 20,0	< 20,0
FIRED CHEMICAL ANALYSIS	SiO_2	mass %	47,2	52,4	58,0	56,7	45,9	56,3	45,4
	Al_2O_3		41,2	36,4	29,5	29,2	38,1	29,6	43,0
	Fe_2O_3		0,78	1,50	2,70	3,06	2,00	3,00	2,60
	TiO_2		0,12	0,40	1,50	1,23	1,20	1,40	2,00
	MgO		7,60	7,40	6,10	6,75	10,50	6,50	4,80
	CaO		0,50	0,20	0,40	0,45	0,30	0,40	0,40
	Na_2O		0,50	0,10	0,10	0,16	0,10	0,10	0,10
	K_2O		1,80	1,40	1,10	0,92	1,00	0,90	0,90
	Cr_2O_3		-	-	-	1,08	-	1,30	-
	L. O. I.		5,50	3,80	8,40	7,80	6,40	6,60	5,80
STANDARD PRESENTATION	**Form of delivery**	-	Spray-dried powder	Spray-dried powder	Spray-dried powder	Spray-dried powder	Spray-dried powder Filter-cakes	Spray-dried powder	Spray-dried powder
	Bulk density (typical)	$kg.m^{-3}$	950	1100	1020	1000	950-1000	1000	960-1020
	Moisture content (spray dried)	mass %	3 (± 0,5)	5,0-6,5	9,5 (± 0,5)	On request	2,0-3,0 /18,0-22,0	3,0-6,0	2,0 (± 1,0)
	Packaging	-	1000 kg big-bags 25 kg bags on pallets	1000 kg big-bags 25 kg bags on pallets	1000 kg big-bags 25 kg bags on pallets	1000 kg big-bags 25 kg bags on pallets	25 kg bags on pallets Filter-cakes on pallets	1000 kg big-bags 25 kg bags on pallets	1000 kg big-bags 25 kg bags on pallets

Depending on minimum volumes, we can adjust for any specific customer needs: moisture, bulk density and organic binders for all bodies / packaging and form of delivery for extrusion bodies.

USE			High temperature parts, abrasion parts, electrical connectors & fuses, material forming, chemical and wear resistant parts, grinding & polishing media ceramic rollers, slide gates - ladles & filters for molten metal, protection tubes for thermocouples, wear pads, laboratory equipment, dosing pistons, ionisation probes, valves discs, ceramic cores ...							
INTERNATIONAL NORM GROUP			C620				C786		C795	
			Low-alkali mullite ceramics				High alumina ceramics			
PRODUCT REFERENCE			**AP607B**	**AM607B**	**AP612B**	**AF307B**	**AP590B**	**AP592B**	**AP596B**	**AP598B**
FORMING PROCESS			Dry pressing	Extruding	Dry pressing	Extruding	Dry pressing	Dry pressing	Dry pressing	Dry pressing
FIRING COLOUR			White	White	White	White	White	White	White	White
		Units								
FIRING TEMPERATURE		°C	1280 - 1320	1320 - 1360	1320 - 1360	1300 - 1340	1380 -1420	1430 - 1470	1580 - 1620	1630 - 1670
SHRINKAGE TO MOULD DIMENSIONS		%	12,5 (± 0,5)	14,0 (± 0,5)	11,3 (± 0,5)	11,0 (± 0,3)	12,7 (± 0,5)	13,1 (± 0,5)	14,7 (± 0,5)	14,8 (± 0,5)
PHYSICAL PROPERTIES	**Fired M.O.R.**	MPa	150	185	150	180	260	270	300	350
	Coefficient thermal expansion (20 - 600°C)	10^{-7} K^{-1}	70	71	66	66	74	74	74	76
	Fired density (typical)	$g.cm^{-3}$	2,87	2,87	3,10	3,10	3,50 - 3,60	3,60 - 3,70	3,70 - 3,80	3,85 - 3,88
	Open porosity	vol %	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
FIRED CHEMICAL ANALYSIS	**SiO_2**	mass %	25,0	22,0	18,5	18,3	-	-	-	-
	Al_2O_3		69,2	73,0	77,4	77,8	90,0	92,0	96,0	98,0
	Fe_2O_3		0,32	0,26	0,24	0,23	-	-	-	-
	TiO_2		0,27	0,19	0,10	0,01	-	-	-	-
	MgO		1,70	1,20	1,64	1,66	-	-	-	-
	CaO		0,40	0,40	0,15	0,22	-	-	-	-
	Na_2O		1,20	1,20	0,78	0,73	0,20	0,20	0,20	0,20
	K_2O		1,70	1,60	1,13	1,05	-	-	-	-
	L. O. I.		3,80	3,80	5,90	3,00	4,20	4,10	4,20	4,2
STANDARD PRESENTATION	**Form of delivery**	-	Spray-dried powder	Spray-dried powder	Spray-dried powder	Spray-dried powder	Spray-dried powder	Spray-dried powder	Spray-dried powder	Spray-dried powder
	Bulk density (typical)	$kg.m^{-3}$	1050	1050	980 - 1070	1040 - 1100	1200 - 1250	1200 - 1250	1280 - 1320	1230 - 1280
	Moisture content (spray dried)	mass %	3,0 (± 0,5)	4,0 (± 0,5)	0,3 (± 0,1)	0,5 (± 0,1)	0,3 (± 0,1)	0,3 (± 0,1)	0,3 (± 0,1)	0,3 (± 0,1)
	Packaging	-	1000 kg big-bags 25 kg bags on pallets	1000 kg big-bags 25 kg bags on pallets	25 kg bags on pallets	25 kg bags on pallets	25 kg bags on pallets	25 kg bags on pallets	25 kg bags on pallets	25 kg bags on pallets

Depending on minimum volumes, we can adjust for any specific customer needs: moisture, bulk density and organic binders for all bodies / packaging and form of delivery for extrusion bodies.

USE			STEATITE ($3MgO\text{-}4SiO_2$)				CORDIERITE ($2MgO\text{-}2Al_2O_3\text{-}5SiO_2$)			ALUMINA
KEY POINTS			Microcrystalline - Low CaO content - No chlorite				High chlorite content for cordierite synthesis			Limit growth of corundum grains
ORIGIN			AUSTRALIA			USA	AUSTRIA		FRANCE	FRANCE
PRODUCT REFERENCE			Luzenac EC Lump	Luzenac EC40	Luzenac EC125	Yellowstone 140	Luzenac HK70	Luzenac H100	Luzenac 2	Luzenac 2C Lump
		Units								
MINERAL ANALYSIS	Talc	%	96	96	96	98	47	47	48	46
	Chlorite		3	3	3	Traces	50	50	49	50
	Magnesite		-	-	-	-	-	1	-	-
	Quartz		-	-	-	-	-	2	-	-
	Dolomite		1	1	1	1	3	-	2	2
	Calcite		-	-	-	-	-	-	1	-
CHEMICAL ANALYSIS	SiO_2	mass %	61,2	61,0	61,0	63,0	46,0	48,0	46,0	46,0
	MgO		31,2	31,2	31,2	30,5	30,0	30,0	31,0	31,0
	Al_2O_3		1,0	1,0	1,0	0,2	11,0	11,0	10,0	9,2
	Fe_2O_3		0,9	0,9	0,9	1,4	2,0	2,0	1,9	2,0
	CaO		< 0,3	0,3	0,3	0,3	0,5	0,5	1,1	1,0
	TiO_2		-	< 0,1	< 0,1	< 0,1	0,2	0,2	-	-
	K_2O		-	< 0,01	< 0,01	0,01	0,30	0,30	-	-
	Na_2O		-	0,08	0,08	0,03	0,10	0,10	-	-
	L. O. I. (105°C)		5,5	5,5	5,5	5,3	9,5	9,5	9,4	9,6
SURFACE AREA	B. E. T.	$m^2.g^{-1}$	-	10,0	7,5	8,0	5,5	2,1	2,9	-
GRINDING	Screen residue	%	-	40 µm: < 2 %	125 µm: < 13 %	75 µm: < 12 %	63 µm: < 3 %	10 µm: < 2 %	40 µm: < 2 %	-
STANDARD PRESENTATION	Form of delivery	-	Lump 25-150 mm	Ground powder	Ground powder	Ground powder	Ground powder	Ground powder	Ground powder	Lump 0-20 mm
	Moisture content (dried 110°C)	mass %	< 2,0	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,5	< 5,0
	Packaging	-	Bulk 1000 kg Big-bag	1000 kg Big-bag 25 kg bags on pallet	1000 kg Big-bag 25 kg bags on pallet	1000 kg Big-bag 25 kg bags on pallet	1000 kg Big-bag 25 kg bags on pallet	1000 kg Big-bag 25 kg bags on pallet	1000 kg Big-bag 25 kg bags on pallet	Bulk 1000 kg Big-bag

USE			STEATITE ($3MgO\text{-}4SiO_2$)				CORDIERITE ($2MgO\text{-}2Al_2O_3\text{-}5SiO_2$)			ALUMINA	
KEY POINTS			C210 & C220			C221	C400 & C500			C600	C700
ORIGIN			U.S.A.	GREAT BRITAIN		FRANCE	BRAZIL	FRANCE		GREAT BRITAIN	NEW ZEALAND
PRODUCT REFERENCE			M&D	Hymod KC	Remblend	RC589	Imerys CR	BS6	BS5	Hymod Excelsior	Premium
MINERAL			Ball Clay	Ball Clay	Kaolin	Ball Clay	Kaolin	Ball Clay	Ball Clay	Ball Clay	Halloysite
		Units									
MINERAL ANALYSIS	Kaolinite	%	-	-	-	-	> 99	90	78	-	-
	Mica		-	-	-	-	0	-	6	-	-
	Quartz		-	-	-	-	< 1	3	12	-	-
CHEMICAL ANALYSIS	SiO_2	mass %	55,5	54,0	48,0	63,3	45,0	43,3	50,5	49,0	49,5
	Al_2O_2		28,1	30,0	36,5	23,9	39,0	38,3	32,9	34,0	35,5
	Fe_2O_3		2,20	1,40	1,01	1,25	0,50	1,20	1,60	1,60	0,29
	TiO		1,50	1,10	0,05	1,25	0,40	1,40	1,50	1,50	0,09
	K_2O		0,60	3,10	2,00	0,60	Tr.	0,30	0,70	1,20	Tr.
	Na_2O		0,20	0,40	0,10	Tr.	Tr.	0,10	0,20	0,20	Tr.
	CaO		0,50	0,30	0,07	0,35	Tr.	0,20	0,30	0,30	Tr.
	MgO		0,70	0,50	0,30	0,25	Tr.	0,20	0,30	0,20	Tr.
	L. O. I. (105°C)		10,7	9,2	12,0	9,0	14,0	15,0	12,0	12,0	13,80
PLASTICITY	Particle size analysis	mass %	> 5 µm: 97,0 %	> 5,0 µm: 5,0 %	> 8,0 µm: 19,0 %	> 40 µm: < 8,1 %	> 45 µm: < 0,02 %	> 100 µm: 3,0 %	> 100 µm: 1,0 %	> 5 µm: 4,0 %	> 240 mesh: < 0,1%
			< 0,2 µm: 61,0 %	< 0,5 µm: 65,0 %	< 0,2 µm: 39,0 %	-	< 2 µm: 50,0	-	-	< 0,5 µm: 80,0 %	-
	Modulus of rupture (dried 105°C)	MPa	12,0	7,5	0,5	45,0	-	2,0	2,5	7,5	2,90
STANDARD PRESENTATION	Form of delivery	-	Air-floated	Shredded	Lump *	Lump *	Lump *	Ground powder	Ground powder	Shredded	Lump * 0 - 20 mm
	Moisture content (dried 110°C)	mass %	3,0	< 20,0	< 12,0	< 18,0	18,0	< 1,0	< 1,0	< 20,0	< 3
	Packaging	-	Bulk 1000 kg Big-bag / 25 kg bags on pallets	Bulk 1000 kg Big-bag / 25 kg bags on pallets	Bulk 1000 kg Big-bag / 25 kg bags on pallets	Bulk 1000 kg Big-bag / 25 kg bags on pallets	Bulk 1000 kg Big-bag	25 kg bags on pallets	25 kg bags on pallets	Bulk 1000 kg Big-bag / 25 kg bags on pallets	25 kg bags on pallets

** Depending on minimum volumes we can deliver also dried and ground form.*

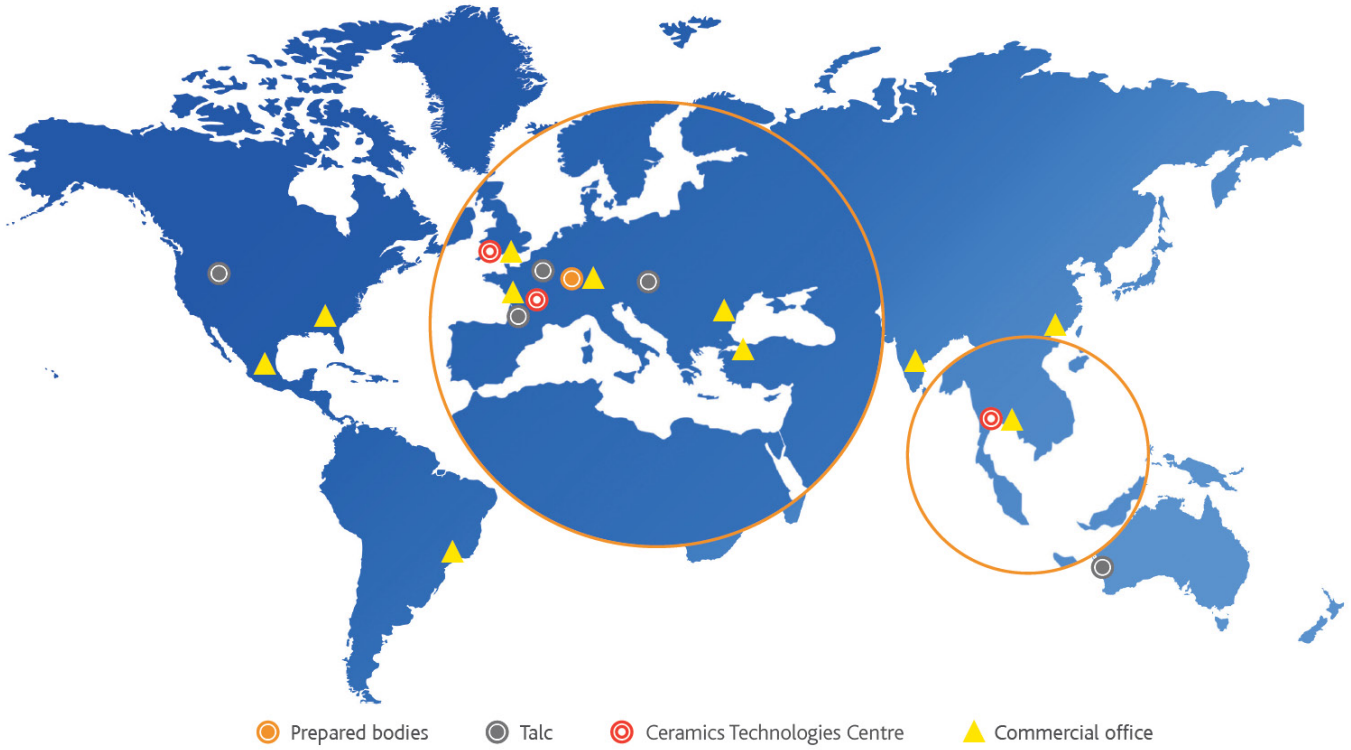
USE			CORDIERITE ($2MgO-2Al_2O_3-5SiO_2$)	
KEY POINTS			Reduce shrinkage & thermal expansion - Opening agent for extruding	
PRODUCT REFERENCE			CLAYRAC ARTAL 23	CLAYRAC 40/42
		Units		
MINERAL ANALYSIS	Cordierite	%	X	
	Mullite			X
	Cristobalite			X
CHEMICAL ANALYSIS	SiO_2	mass %	53,9	54,2
	Al_2O_2		30,9	41,0
	Fe_2O_3		1,90	1,70
	TiO		1,30	1,70
	K_2O		0,80	0,70
	Na_2O		0,10	0,10
	CaO		0,50	0,30
	MgO		10,50	0,30
	L. O. I. (105°C)		0,0	0,0
PHYSICAL PROPERTIES	Bulk density	$g.cm^{-3}$	2,10	2,42
	Apparent porosity	mass %	8,0	8,0
	Water absorption	mass %	3,8	3,3
	Coefficient thermal expansion (20 - 600°C)	10^{-7} K^{-1}	0,14	0,39
	Maximum service temperature	°C	1300	1420
STANDARD PRESENTATION	Form of delivery	-	Sand 2-4 mm or Ground 100 or 200 µm	Sand 2 -4 mm or Ground 100 or 200 µm
	Moisture content (dried 110°C)	mass %	< 1,0	< 1,0
	Packaging	-	1000 kg Big-bag or 25 kg bags on pallets	1000 kg Big-bag or 25 kg bags on pallets

Depending on volumes, the grinding can be adapted to the customer needs.

Teams dedicated to technical ceramics

Imerys Ceramics has regional hubs in Asia, Europe, North and South America. Thanks to a global network of production sites across several continents, we have a large and varied portfolio. Our integrated logistics network offers customers the benefits of reliable supply chain services.

Serving customers worldwide



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