

Conventional Castables

Product	Maximum service temperature	Water addition at site	Reversible thermal expansion at 1000°C	Refractoriness	Dry density at 110°C	Cold Crushing Strength		Permanent Linear Change on reheating		Al ₂ O ₃	Fe ₂ O ₃
	°C	%	%	Orton Cone/°C	kg/m ³	kg/cm ²		%		%	%
Mac Cast	1300	11-14	± 0.55	20/1564	1900	110°C/ 24hrs.	250	800°C/3hrs.	± 0.50	30.0	4.0
						800°C/ 3hrs.	200				
Mac Crete Special	1350	11-12	± 0.55	1450	2250	110°C/ 24hrs.	400	1350°C/2hrs.	± 0.8	45.0	4.0
						800°C/ 3hrs.	250				
						1350°C/ 3hrs.	300				
Mac Crete Normal	1400	10.5-12	± 0.55	1580	2100	110°C/ 24hrs.	250	1400°C/3hrs.	± 1.0	45.0	4.0
						800°C/ 3hrs.	240				
						1350°C/ 3hrs.	225				
Mac Crete Super	1450	11-12	± 0.65	1680	2500	110°C/ 24hrs.	350	1400°C/3hrs.	± 1.0	65.0	5.0
						800°C/ 3hrs.	300				
						1450°C/ 3hrs.	450				
Macheat C	1500	10.5-11.5	± 0.55	30/1665	2100	110°C/ 24hrs.	350	1500°C/3hrs.	± 1.0	50.0	1.5
						800°C/ 3hrs.	280				
						1450°C/ 3hrs.	500				
Macheat C Super	1500	10-11	± 0.55	1665	2280	110°C/ 24hrs.	450	1500°C/3hrs.	± 0.9	50.0	1.7
						800°C/ 3hrs.	390				
Macheat C Special	1500	11-12	± 0.55	1500	2000	110°C/ 24hrs.	400	1500°C/3hrs.	± 1.0	50.0	1.3
						800°C/ 3hrs.	360				
						1350°C/ 3hrs.	260				
Macheat K	1600	10-11	± 0.60	31/1683	2200	110°C/ 24hrs.	350	1550°C/3hrs.	± 1.5	60.0	1.0
						800°C/ 3hrs.	280				
						1550°C/ 3hrs.	520				
Macheat K Special	1600	10-11	± 0.88	1670	2000	110°C/ 24hrs.	450	1550°C/3hrs.	± 1.5	61.0	1.0
						800°C/ 3hrs.	350				
						1550°C/ 3hrs.	550				

Maximum Grain size: 5mm

Nature of Bond: Hydraulic

Installation: Pouring / Casting

Delivery state: Dry

Shelflife: 6 months

In addition to the above we can supply tailor made specifications to suit customer's requirement. For each product, a current product information will be provided. Please follow application procedure sheet before use.

The above data constitutes average results of current production test values:

Conventional Castables

Product	Maximum service temperature	Water addition at site	Reversible thermal expansion at 1000°C	Refractoriness	Dry density at 110°C	Cold Crushing Strength		Permanent Linear Change on reheating		Al ₂ O ₃	Fe ₂ O ₃	CaO	SiO ₂
	°C	%	%	Orton Cone/°C	kg/m ³	kg/cm ²		%		%	%	%	%
Macheat A High Strength	1700	9-10	± 0.80	1750	2750	110°C/24hrs.	650	1550°C/3hrs.	± 1.0	88.0	0.6	-	-
Macheat A Supreme	1700	10-11	± 0.80	1750	2650	110°C/24hrs.	500	1500°C/3hrs.	± 1.5	85.0	1.2	-	-
						800°C/3hrs.	400						
						1550°C/3hrs.	600						
Macheat M	1700	9-10	± 0.75	1800	2600	110°C/24hrs.	350	1550°C/3hrs.	± 1.0	80.0	1.5	-	-
						800°C/3hrs.	450						
						1550°C/3hrs.	600						
Macheat A	1750	9-10	± 0.80	37/1820	2800	110°C/24hrs.	600	1500°C/3hrs.	± 1.0	88.0	1.0	-	-
						800°C/3hrs.	430						
						1550°C/3hrs.	650						
Macheat 94T	1800	9-10	± 0.90	38/1835	2800	110°C/24hrs.	600	800°C/3hrs.	± 0.1	94.5	0.3	5.0	0.3
						800°C/3hrs.	450	1100°C/3hrs.	± 0.2				
						1100°C/3hrs.	400	1550°C/3hrs.	± 0.4				
						1550°C/3hrs.	650						
Macheat 97T	1850	9-10	± 0.90	38/1835	2600	110°C/24hrs.	400	1100°C/3hrs.	± 0.25	96.0	0.3	2.8	0.3
						800°C/3hrs.	280						
						1100°C/3hrs.	280	1550°C/3hrs.	± 0.8				
						1550°C/3hrs.	380						

Maximum Grain size: 5mm

Nature of Bond: Hydraulic

Installation: Pouring / Casting

Delivery state: Dry

Shelflife: 6 months

In addition to the above we can supply tailor made specifications to suit customer's requirement. For each product, a current product information will be provided. Please follow application procedure sheet before use.

The above data constitutes average results of current production test values

Low Cement Castables

Product	Maximum service temperature	Water addition at site	Reversible thermal expansion at 1000°C	Refractoriness	Dry density at 110°C	Cold Crushing Strength				Permanent Linear Change on reheating			Al ₂ O ₃	Fe ₂ O ₃		
						Orton Cone/°C	kg/m ³	kg/cm ²				%				
								110°C/24hrs.	800°C/ 3hrs.	1100°C/3hrs.	1500°C/3hrs.	800°C/3hrs.			1100°C/3hrs.	1500°C/3hrs.
MAC VIB 45	1550	5.0-6.0	± 0.55	32/1717	2300	700	800	900	1000	± 0.2	± 0.3	± 1.0	45.0	1.0		
MAC VIB 60	1600	5.0-6.0	± 0.66	36/1804	2600	750	800	900	1000	± 0.2	± 0.3	± 1.0	60.0	1.5		
MAC VIB 60S	1600	4.7-5.5	± 0.60	36/1804	2550	750	800	900	1000	± 0.2	± 0.3	± 0.8	58.0	1.0		
MAC VIB 70	1600	4.5-5.0	± 0.65	36/1804	2700	750	800	900	1000	± 0.2	± 0.3	± 1.0	70.0	1.5		
MAC VIB 70LI	1650	4.5-5.2	± 0.65	36/1804	2650	700	800	900	1000	± 0.12	± 0.2	± 0.7	70.0	0.8		
MAC VIB 70M	1700	4.5-5.5	± 0.65	37/1820	2600	700	800	900	1100	± 0.2	± 0.3	± 0.6	70.0	0.5		
MAC VIB 80	1700	4.5-4.8	± 0.75	37/1820	2900	800	900	1000	1200	± 0.2	± 0.3	± 0.8	80.0	1.5		
MAC VIB 90	1700	4.2-4.5	± 0.85	37/1820	3050	950	1000	1150	1200	± 0.2	± 0.3	± 0.6	90.0	1.0		
MAC VIB 95	1800	4.0-4.8	± 0.90	38/1835	3100	1000	1050	1100	1250	± 0.2	± 0.3	± 0.8	94.0	0.3		

Maximum Grain size: 6mm Nature of Bond: Hydraulic Installation: Vibrating Delivery state: Dry Shelflife: 3 months

In addition to the above we can supply tailor made specifications to suit customer's requirement. For each product, a current product information will be provided. Please follow application procedure sheet before use.

The above data constitutes average results of current production test values

Insulating Castable

Product	Maximum service temperature	Water addition at site	Reversible thermal expansion at 1000°C	Refractoriness	Dry density at 110°C	Cold Crushing Strength		Thermal conductivity at 500°C hot face	Permanent Linear Change on reheating		Al ₂ O ₃	Fe ₂ O ₃
						kg/cm ²			%			
	°C	%	%	Orton Cone/°C	kg/m ³			Kcal/hr. m. °C			%	%
Maclite LT	500	25-30	± 0.50	-	1400	110°C/24 hrs.	90	0.40	500°C/3 hrs.	± 0.5	24.0	2.5
						500°C/3 hrs	45					
Maclite Pourable	900	60-70	± 0.60	-	700	110°C/24 hrs.	15	0.22	800°C/3 hrs.	± 1.5	20.0	9.0
						800°C/3 hrs.	12					
Maclite 4	1000	100-110	± 0.55	-	500	110°C/24 hrs.	4	0.10	800°C/3 hrs.	± 0.5	30.0	11.0
						800°C/3 hrs.	2					
Maclite 7	1100	70-80	± 0.57	12/1337	850	110°C/24 hrs.	12	0.14	800°C/3 hrs.	± 1.0	33.0	8.5
						800°C/3 hrs.	4		1100°C/3 hrs.	± 1.6		
						1000°C/3 hrs.	6					
Maclite 9	1100	55-60	± 0.57	14/1398	1000	110°C/24 hrs.	15	0.28	500°C/3 hrs.	± 0.2	33.0	6.0
						800°C/3 hrs.	6		800°C/3 hrs.	± 0.6		
						1000°C/3 hrs.	10		1100°C/3 hrs.	± 1.0		
Maclite 9HS	1100	38-45	± 0.57	14/1398	1000	110°C/24 hrs.	20	0.28	1100°C/3 hrs.	± 1.5	40.0	3.0
						800°C/3 hrs.	10					
						1300°C/3 hrs.	16					
Maclite 10S	1100	45-50	± 0.55	13/1349	1100	110°C/24 hrs.	20	0.22	800°C/3 hrs.	± 0.8	30.0	6.0
						800°C/3 hrs.	15		1200°C/3 hrs.	± 1.2		
						1200°C/3 hrs.	12					
Maclite 8S	1300	45-50	± 0.57	15/1430	900	110°C/24 hrs.	25	0.20	800°C/3 hrs.	± 0.3	40.0	1.0
						800°C/3 hrs.	20		1100°C/3 hrs.	± 0.5		
						1300°C/3 hrs.	30		1300°C/3 hrs.	± 1.0		
Maclite 11LI(Z)	1300	40-45	± 0.60	14/1398	1000	110°C/ 24 hrs.	10	0.22	1100°C/3 hrs.	± 1.0	45.0	1.2
						800°C/3 hrs.	5					
						1100°C/3 hrs.	5		1300°C/3 hrs.	± 1.5		
						1300°C/ 3 hrs.	35					
Maclite 11	1350	35-40	± 0.57	14/1398	1250	110°C/ 24 hrs.	35	0.31	1100°C/3 hrs.	± 0.2	34.0	3.5
						800°C/3 hrs.	25					
						1000°C/ 3 hrs.	25		1300°C/3 hrs.	± 1.0		
						1300°C/3 hrs.	40					
Maclite 11LI	1350	35-40	± 0.60	14/1398	1250	110°C/24 hrs.	45	0.34	1100°C/3 hrs.	± 0.2	45.0	1.5
						800°C/ 3 hrs.	30					
						1100°C/3 hrs.	30		1300°C/3 hrs.	± 1.0		
						1300°C/3 hrs.	50					

Maximum Grain size: 6mm

Nature of Bond: Hydraulic

Installation: Rodding/Tamping*

Delivery state: Dry

Shelflife: 6 months

* For Maclite Pourable: Pouring

In addition to the above we can supply tailor made specifications to suit customer's requirement. For each product, a current product information will be provided. Please follow application procedure sheet before use.

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Insulating Castables

Product	Maximum service temperature	Water addition at site	Reversible thermal expansion at 1000°C	Refractoriness	Dry density at 110°C	Cold Crushing Strength		Thermal conductivity at 500°C hot face	Permanent Linear Change on reheating		Al ₂ O ₃	Fe ₂ O ₃
						Orton Cone/°C	kg/m ³		kg/cm ²			
Maclite 11 SPL.	1350	30-35	± 0.6	14/1398	1100	110°C/24 hrs.	30	0.30	1100°C/3 hrs.	± 0.2	41.0	1.5
						800°C/3 hrs.	25					
						1100°C/3 hrs.	25		1300°C/3 hrs.	± 1.0		
						1300°C/3 hrs.	35					
Maclite 13	1350	30-35	± 0.6	14/1398	1450	110°C/24 hrs.	50	0.33	1100°C/3 hrs.	± 0.2	39.0	3.5
						800°C/3 hrs.	30					
						1000°C/3 hrs.	30		1300°C/3 hrs.	± 0.6		
						1300°C/3 hrs.	50					
Maclite 13LI	1350	35-40	± 0.6	15/1430	1450	110°C/24 hrs.	80	0.40	1100°C/3 hrs.	± 0.2	44.0	1.5
						800°C/3 hrs.	40					
						1100°C/3 hrs.	80		1300°C/3 hrs.	± 0.6		
						1300°C/3 hrs.	40					
Maclite 15	1350	30-35	± 0.6	15/1530	1600	110°C/24 hrs.	90	0.44	1100°C/3 hrs.	± 0.2	40.0	3.2
						800°C/3 hrs.	60					
						1000°C/3 hrs.	60		1300°C/3 hrs.	± 0.6		
						1300°C/3 hrs.	70					
Maclite 15LI	1350	25-30	± 0.6	15/1430	1600	110°C/24 hrs.	130	0.44	800°C/3 hrs.	± 0.2	45.0	1.5
						800°C/3 hrs.	75		1100°C/3 hrs.	± 0.5		
						1100°C/3 hrs.	75		1300°C/3 hrs.	± 1.0		
						1300°C/3 hrs.	90					
Maclite HT	1500	25-35	± 0.6	23/1605	1550	110°C/24 hrs.	80	0.42	1100°C/3 hrs.	± 0.5	63.0	1.4
						800°C/3 hrs.	40					
						1100°C/3 hrs.	40		1300°C/3 hrs.	± 1.5		
						1300°C/3 hrs.	50					
Maclite 97L	1800	20-25	± 0.8	38/1835	1650	110°C/24 hrs.	70	1.10	800°C/3 hrs.	± 1.1	95.0	0.3
						800°C/3 hrs.	60		1100°C/3 hrs.	± 0.2		
						1100°C/3 hrs.	40		1550°C/3 hrs.	± 1.2		
						1550°C/3 hrs.	60					

Maximum Grain size: 6mm

Nature of Bond: Hydraulic

Installation: Rodding/Tamping

Delivery state: Dry

Shelflife: 6 months

In addition to the above we can supply tailor made specifications to suit customer's requirement. For each product, a current product information will be provided. Please follow application procedure sheet before use.

The above data constitutes average results of current production test values

High Alumina, Zircon Mortar, Patch & Ramming Masses

Product	Grain size	Type of setting	Sintering Temperature	Al ₂ O ₃	ZrO ₂
	(mm)		°C	(%)	(%)
MCL ZSM	0 - 0.5	Chemical	1000 - 1100		50.0
MCL ZMM	0 - 0.5	Chemical	1000 - 1100	65.0	15.0
MCL PATCH ZS	0 - 2.0	Chemical	1000 - 1100		50.0
MCL PATCH ZM	0 - 2.0	Chemical	1000 - 1100	55.0	24.0
MCL RAM ZS	0 - 2.0	Chemical	1000 - 1150		50.0
MAC SET-70K	0 - 0.5	Chemical	1200	69.0	
MAC SET-90K	0 - 0.5	Chemical / Ceramic	1200	89.0	

Insulating, Heat & Air Setting Mortar & Pot Mix

Product	Grain size	Type of Setting	Service Temperature	Refractoriness	Al ₂ O ₃	Fe ₂ O ₃
	(mm)		°C	Orton	(%)	(%)
MAC INS-30	0 - 0.5	Ceramic		29 - 30	30.0	2.0
MAC INS-K	0 - 0.5	Ceramic		32 - 33	42.0	1.8
MAC SET INSUL-K	0 - 0.5	Air Setting	1500		42.0	1.5
MAC SET ASC	0 - 0.5	Air Setting	1600		42.0	1.5
MAC SET SILL	0 - 0.5	Air Setting	1650		52.0	1.5
MAC SET SILL SUPER	0 - 0.5	Air Setting	1500	35	58.0	1.2
MAC SET-50 (F) SINGLE COMPONENT	0 - 0.5	Air Setting	1550		50.0	2.5
MAC SET-50 (N) SINGLE COMPONENT	0 - 1.0	Air Setting	1550		50.0	2.5
MAC SET-60	0 - 0.5	Air Setting	1600		60.0	2.5
MAC SET-70	0 - 0.5	Air Setting	1650		70.0	3.0

Note :

Delivery state : For Air Setting Mortar Single / Double component i.e. Dry and Liquid Binder.
 Grading : 95% passing through the maximum indicated grain size.
 Service Temperature : The temperature given above are indicative.
 Above are average test data subject to reasonable variation.
 MAC SET-50 is equivalent to ACCOSET-50 of ACC.

In addition, we can supply tailor made variety to suit **Customer's requirement.**

Fireclay Mortar

Product	Refractoriness	Grain size	Service Temperature	Type of Setting	Al ₂ O ₃	Fe ₂ O ₃
	Orton	(mm)	°C		(%)	(%)
MAC MH	29 - 30	0 - 1	1300	Ceramic	30.0	2.0
MAC HH	31 - 32	0 - 1	1400	Ceramic	36.0 - 38.0	2.0
MAC SH	32 - 33	0 - 0.5	1450	Ceramic	42.0 - 45.0	2.0
MAC SILL	34 - 35	0 - 0.5	1450	Ceramic	50.0 - 52.0	1.5
MAC SILL (SPL.)	35 - 36	0 - 0.5	1500	Ceramic	54.0 - 56.0	1.5
MAC-50	33 - 34	0 - 0.5	1550	Ceramic	50.0	2.5
MAC-60	34 - 35	0 - 0.5	1600	Ceramic	60.0	2.5

High Alumina Mortar

Product	Refractoriness	Grain size	Service Temperature	Type of Setting	Al ₂ O ₃	Fe ₂ O ₃
	Orton	(mm)	°C		(%)	(%)
MAC-70	35 - 36	0 - 0.5	1650	Ceramic	70.0	3.0
MAC-70S	35 - 36	0 - 0.5	1700	Ceramic	70.0	2.0
MAC-70 LI	36	0 - 0.5	1700	Ceramic	70.0	1.0
MAC-80	36 - 37	0 - 0.5	1700	Ceramic	80.0	3.0
MAC-80 LI	38	0 - 0.5	1750	Ceramic	80.0	0.5
MAC-90 SPL	38	0 - 0.5	1800	Ceramic	90.0	0.5

Plastic Materials

Product	Installation	Grain size	Service Temperature	Nature of Bond	B.D. at 1000°C	Status of delivery	Al ₂ O ₃
		(mm)	°C		gm/cm ³		%
Plastocast 30P	Ramming	0 - 7	1450	Ceramic	1.90	Slices	30.0
Plastocast 40P	Ramming	0 - 7	1540	Ceramic	2.06	Slices	40.0
Plastocast 45P	Ramming	0 - 7	1600	Ceramic	2.10	Slices	45.0
Plastocast 60P	Ramming	0 - 7	1650	Ceramic	2.27	Slices	60.0
Plastocast 80P	Ramming	0 - 7	1700	Ceramic	2.55	Slices	80.0