

## CERTIFICADO DA QUALIDADE

### ENSAIOS QUÍMICOS E FÍSICOS DO CIMENTO CPV ARI

Abr/2024

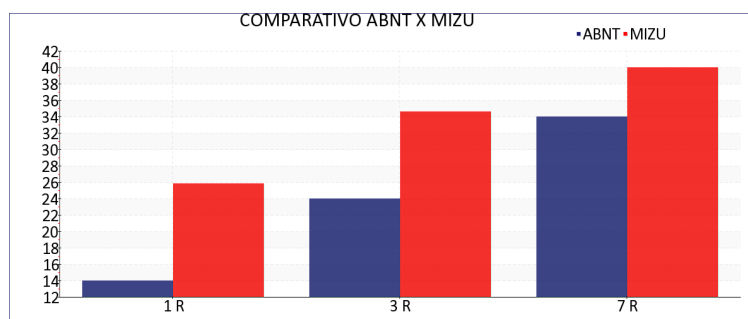
DATA	COMPOSIÇÃO QUÍMICA			RESISTÊNCIA A COMPRESSÃO				FINURA				EXP.	PEGA		CONSIST. NORMAL
	PF	RI	SO3	1 DIA	3 DIAS	7 DIA	28 DIAS	MASSA ESPECÍFICA	BLAINE	#P325	#200	QUENTE	INICIO	FIM	
	<6,5	<5,0	<4,5	>14,0	>24,0	>34,0		g/cm <sup>3</sup>	cm <sup>2</sup> /g	%	%	mm	>60	<600	
	%	%	%	MPa	MPa	MPa	MPa						min	min	%
01/04/2024	3.07	0.90	4.03	26.00	34.33	40.06		3.12	4908	0.80	0.07	0.00	120	155	31.10
02/04/2024	2.59	0.92	3.98	25.60	33.86	40.03		3.12	4889	0.70	0.07	0.00	120	155	31.20
04/04/2024	2.87	0.94	4.02	26.65	35.00	39.26		3.12	4851	0.56	0.07	0.00	122	156	31.14
10/04/2024	3.78	0.95	4.52	25.10	35.76	40.90		3.12	4946	0.64	0.09	0.00	109	134	30.70
11/04/2024	2.64	0.94	4.10	26.45	36.56	42.80		3.12	4889	0.56	0.08	0.00	116	144	30.96
12/04/2024	2.94	1.52	3.92	26.30	35.36	38.86		3.12	5057	0.59	0.07	0.00	115	146	30.86
13/04/2024	3.38	0.68	4.07	24.80	32.86	38.86		3.12	4983	0.50	0.07	0.00	104	134	30.88
16/04/2024	2.81	1.00	4.02	26.15	33.86	38.53		3.12	5057	0.45	0.06	0.00	112	145	30.80
18/04/2024	3.09	0.94	4.03	25.85	34.53	40.50		3.12	5075	0.54	0.08	0.00	134	183	32.98
19/04/2024	3.04	0.91	4.41	26.15	36.06	40.90		3.12	5016	0.47	0.11	0.00	106	137	31.40
22/04/2024	3.09	1.01	4.18	26.05	35.90	41.56		3.12	4994	0.61	0.08	0.00	101	129	31.28
23/04/2024	2.82	1.01	4.00	26.00	34.10	40.27		3.12	4946	0.31	0.04	0.00	111	142	31.30
26/04/2024	3.06	0.83	4.43	25.50	35.13	40.50		3.12	4901	0.42	0.05	0.00	122	153	31.18
29/04/2024	2.80	0.81	4.04	26.50	34.30	39.02		3.12	4965	0.38	0.03	0.00	111	141	31.48
30/04/2024	2.31	0.81	3.77	24.75	32.53	38.00		3.12	4857	0.71	0.06	0.00	117	150	31.26

Controle Estatístico

	PF	RI	SO3	R1	R3	R7	R28	MASSA ESPECÍFICA	BLAINE	#P325	#200	QUENTE	INICIO	FIM	CONSIST. NORMAL
Média	2.95	0.94	4.10	25.86	34.68	40.00		3.12	4956	0.55	0.07	0.00	115	147	31.23
Desvio	0.34	0.18	0.20	0.59	1.16	1.27		0.00	74	0.13	0.02	0.00	8	13	0.53
NBR 16697:2018	<6,5	<3,5	<4,5	>14,0	>24,0	>34,0	-	-	-	-	<6,0	<5,0	>60	<600	-

Comparativo ABNT x MIZU

	ABNT	MIZU
R1	14	25.86
R3	24	34.68
R7	34	40.00
R28	--	



*Kênia gomes aires*

Responsável Técnico

Kênia Gomes Aires

CRQ: 21.3.00318

## CERTIFICADO DA QUALIDADE

### ENSAIOS QUÍMICOS E FÍSICOS DO CIMENTO CPV ARI

Mai/2024

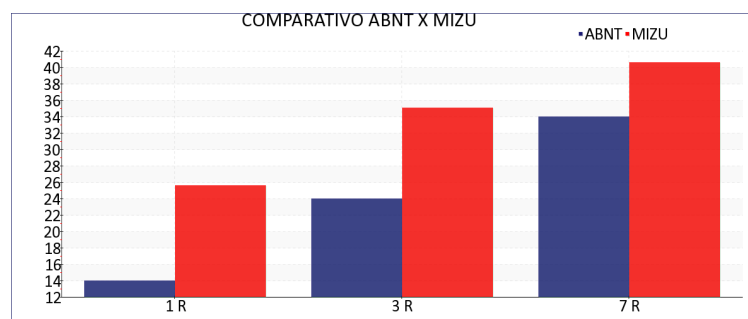
DATA	COMPOSIÇÃO QUÍMICA			RESISTÊNCIA A COMPRESSÃO				FINURA				EXP.	PEGA		CONSIST. NORMAL
	PF	RI	SO3	1 DIA	3 DIAS	7 DIA	28 DIAS	MASSA ESPECÍFICA	BLAINE	#P325	#200	QUENTE	INICIO	FIM	
	<6,5	<5,0	<4,5	>14,0	>24,0	>34,0		g/cm <sup>3</sup>	cm <sup>2</sup> /g	%	%	mm	>60	<600	
02/05/2024	2.99	0.86	3.91	26.25	36.03	40.90		3.12	4838	0.60	0.06	0.00	100	130	31.28
06/05/2024	2.75	0.92	4.26	25.95	34.50	40.36		3.12	4820	0.64	0.08	0.00	101	132	31.26
09/05/2024	4.33	0.81	3.86	24.05	34.83			3.12	4838	0.69	0.06	0.00	115	146	31.34
10/05/2024	2.66	0.83	4.08	26.15				3.12	4875	0.39	0.05	0.00	106	138	31.20
11/05/2024	2.83	0.83	4.04	24.35				3.12	4837	0.32	0.04	0.00	116	149	31.60
14/05/2024	3.97	1.21	3.85	26.55				3.12	4744	0.39	0.03	0.00	102	132	31.02
14/05/2024	3.36	1.21	4.01	26.15				3.12	4801	0.36	0.04	0.00	109	141	31.16

#### Controle Estatístico

	PF	RI	SO3	R1	R3	R7	R28	MASSA ESPECÍFICA	BLAINE	#P325	#200	EXP.	INICIO	FIM	CONSIST.
Média	3.27	0.95	4.00	25.64	35.12	40.63		3.12	4822	0.48	0.05	0.00	107	138	31.27
Desvio	0.65	0.18	0.14	1.00	0.81	0.38		0.00	41	0.15	0.02	0.00	7	7	0.18
NBR 16697:2018	<6,5	<3,5	<4,5	>14,0	>24,0	>34,0	-	-	-	-	<6,0	<5,0	>60	<600	-

#### Comparativo ABNT x MIZU

	ABNT	MIZU
R1	14	25.64
R3	24	35.12
R7	34	40.63
R28	--	



*Kênia gomes aires*

Responsável Técnico  
Kênia Gomes Aires  
CRQ: 21.3.00318