

CERTIFICADO DE CONTROLE DA QUALIDADE DO CIMENTO



TIPO/CLASSE: **CPIII-40 RS GRANEL**



FÁBRICA: **FVI - FÁBRICA DE VITÓRIA - ES**

MÊS/ANO: **FEVEREIRO/2026**

ENSAIOS QUÍMICOS				ENSAIOS FÍSICOS E MECÂNICOS									
ENSAIOS	PERDA AO FOGO (PF)	RESÍDUO INSOLÚVEL (RI)	TRIOXÍDEO DE ENXÓFRE (SO ₃)	RESISTÊNCIA À COMPRESSÃO			FINURA			EXPANSIBILIDADE A QUENTE	TEMPO DE PEGA		CONSISTÊNCIA NORMAL
				3 DIAS	7 DIAS	28 DIAS	BLAINE	#325	#200		INÍCIO	FIM	
UNIDADE	(%)	(%)	(%)	(MPa)	(MPa)	(MPa)	(cm ² /g)	(%)	(%)	(mm)	(min)	(min)	(%)
LIMITE NORMATIVO (ABNT NBR 16697:2018)	≤ 6,5	≤ 5,0	≤ 4,5	≥ 12,0	≥ 23,0	≥ 40,0	-	-	≤ 8,0	≤ 5	≥ 60	≤ 720	-
02/02/2026	1.32	0.56	1.09	24.0	35.9		4695	0.9	0.1	0.0	176	223	34.2
03/02/2026	1.80	0.60	1.16	24.3	35.5	50.2	4653	0.8	0.1	0.0	165	213	33.7
04/02/2026	1.81	0.58	1.10	24.4	33.4	49.8	4828	0.7	0.1	0.0	165	210	33.6
05/02/2026	2.23	0.40	1.07	22.6	33.1	51.7	4713	0.7	0.1	0.0	161	210	33.7
06/02/2026	2.61	0.30	1.02	23.0	32.1	50.5	4759	0.8	0.1	0.0	171	221	33.7
07/02/2026	1.87	0.87	1.16	22.8	32.2	50.6	4867	1.0	0.1	0.0	184	228	33.7
09/02/2026	1.00	0.59	1.76	23.1	33.3	51.8	4698	0.8	0.1	0.0	170	218	33.7
10/02/2026	1.03	0.80	1.81	22.3	32.2	52.8	4707	0.9	0.2	0.0	162	212	33.7
11/02/2026	1.22	0.76	2.07	21.1	35.3	52.2	4566	1.2	0.2	0.0	160	204	33.7
12/02/2026	1.48	0.75	1.92	22.4	33.2	49.0	4874	1.0	0.2	0.0	148	191	33.7
13/02/2026	1.89	0.67	1.48	23.7	33.6	50.9	4639	1.1	0.1	0.0	159	202	33.7
16/02/2026	1.58	0.66	1.72	23.1	33.7	49.3	4733	1.2	0.1	0.0	153	198	33.6
18/02/2026	1.86	0.73	1.30	23.1	32.8	52.3	4647	1.4	0.2	0.0	152	199	33.6
19/02/2026	1.93	0.34	1.46	23.0	33.5	52.8	4703	1.4	0.2	0.0	150	184	33.6
20/02/2026	1.71	0.46	1.59	22.1	34.1	51.0	4625	1.5	0.2	0.0	162	208	33.6
21/02/2026	1.79	0.72	1.62	23.0	33.9	50.2	4621	1.2	0.1	0.0	150	190	33.2
23/02/2026	1.34	0.75	1.81	23.0	33.8	50.6	4624	1.2	0.3	0.0	169	217	33.4
24/02/2026	1.30	0.65	1.86	22.7	33.7	51.9	4775	1.3	0.2	0.0	153	201	33.4
25/02/2026	1.99	0.46	1.36	23.4	33.1	52.6	4666	1.1	0.1	0.0	150	191	33.2
26/02/2026	1.89	0.62	1.38	25.4	35.6	52.2	4781	1.0	0.2	0.0	159	203	33.1
27/02/2026	2.03	0.49	1.23	24.9	35.0	52.6	4862	0.9	0.1	0.0	172	219	32.9
28/02/2026	1.89	0.81	1.28	24.6	36.4	51.2	4927	0.8	0.1	0.0	171	222	32.9
MÉDIA	1.71	0.62	1.47	23.3	33.9	51.3	4726	1.0	0.2	0.0	162	207	33.5
DESVIO PADRÃO	0.39	0.16	0.32	1.0	1.2	1.2	98	0.2	0.1	0.0	10	12	0.3
MÍNIMO	1.00	0.30	1.02	21.1	32.1	49.0	4566	0.7	0.1	0.0	148	184	32.9
MÁXIMO	2.61	0.87	2.07	25.4	36.4	52.8	4927	1.5	0.3	0.0	184	228	34.2

Kênia Gomes Aires

Responsável Técnico
KÊNIA GOMES AIRES

CRQ: 21.3.00318 - V Região

CERTIFICADO DE CONTROLE DA QUALIDADE DO CIMENTO



TIPO/CLASSE: **CPIII-40 RS GRANEL**



FÁBRICA: **FVI - FÁBRICA DE VITÓRIA - ES**

MÊS/ANO: **MARÇO/2026**

ENSAIOS QUÍMICOS				ENSAIOS FÍSICOS E MECÂNICOS									
ENSAIOS	PERDA AO FOGO (PF)	RESIDUO INSOLÚVEL (RI)	TRIOXIDO DE ENXÓFRE (SO3)	RESISTÊNCIA À COMPRESSÃO			FINURA			EXPANSIB. A QUENTE	TEMPO DE PEGA		CONSIST. NORMAL
				3 DIAS	7 DIAS	28 DIAS	BLAINE	#325	#200		INÍCIO	FIM	
UNIDADE	(%)	(%)	(%)	(MPa)	(MPa)	(MPa)	(cm²/g)	(%)	(%)	(mm)	(min)	(min)	(%)
LIMITE NORMATIVO (ABNT NBR 16697:2018)	≤ 6,5	≤ 5,0	≤ 4,5	≥ 12,0	≥ 23,0	≥ 40,0	-	-	≤ 8,0	≤ 5	≥ 60	≤ 720	-
02/03/2026	1.90	0.44	1.17	22.4	34.2	51.1	4659	1.1	0.1	0.0	177	227	32.9
03/03/2026	1.76	0.69	1.18		36.2	51.0	4787	0.8	0.2	0.0	168	218	33.1
04/03/2026	1.44		1.15	22.3	36.2	51.5	4807	0.9	0.1	0.0	179	231	32.9
05/03/2026	1.51		1.35	23.6	36.2	51.4	4669	1.0	0.1	0.0	175	226	32.9
06/03/2026	2.47		1.33	25.1	35.2	50.4	4526	1.2	0.1	0.0	186	236	33.1
07/03/2026	1.83		1.39	24.1	35.0	49.9	4719	0.9	0.1	0.0	173	224	33.0
09/03/2026	1.61		1.77	25.7	34.9	50.5	4698	0.9	0.1	0.0	175	221	33.2
10/03/2026	2.01		1.41	23.9	35.2	51.7	4738	1.1		0.0	222	282	32.9
11/03/2026	1.97		1.36	25.7	35.6	51.4	4726	1.1		0.0	169	215	33.2
12/03/2026	1.84		1.44	24.9	35.7	50.9	4718			0.0	182	231	33.3
13/03/2026	1.92		1.51	22.8	35.2	49.6	4723			0.0	177	227	33.3
14/03/2026	1.71		1.44	23.3	34.7	49.6	4652			0.0	178	229	33.3
16/03/2026	1.96		1.29	23.8	33.6	50.4	4732			0.0	176	222	33.4
17/03/2026	2.09		1.38	23.1		49.0	4774			0.0	170	218	33.3
18/03/2026	2.03		1.24	24.3	35.0	50.9	4838			0.0	173	226	33.4
19/03/2026	2.22		1.39	24.9		49.0	4704			0.0	182	236	33.4
20/03/2026				22.1	34.8	50.8	4708			0.0	180	230	33.5
21/03/2026				22.8	35.7	49.3	4742			0.0	178	225	33.4
23/03/2026				25.3	34.4	47.6	4761			0.0	178	229	33.4
24/03/2026				23.1	34.4	47.8	4642			0.0	166	215	33.5
25/03/2026				24.4	36.5	47.7	4860			0.0	164	208	33.8
26/03/2026				25.7	34.3	48.9	4791			0.0	160	209	33.7
27/03/2026				25.9	36.3	49.9	4625			0.0	187	235	33.7
28/03/2026				25.1	36.4	49.0	4663			0.0	175	225	33.6
30/03/2026				24.9	33.8	45.9	4612			0.0	171	222	33.6
31/03/2026				25.7	35.2	50.2	4739			0.0	167	216	33.3
MÉDIA	1.89	0.57	1.36	24.2	35.2	49.8	4716	1.0	0.1	0.0	176	226	33.3
DESVIO PADRÃO	0.26	0.18	0.15	1.2	0.8	1.4	74	0.1	0.0	0.0	11	14	0.3
MÍNIMO	1.44	0.44	1.15	22.1	33.6	45.9	4526	0.8	0.1	0.0	160	208	32.9
MÁXIMO	2.47	0.69	1.77	25.9	36.5	51.7	4860	1.2	0.2	0.0	222	282	33.8

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CERTIFICADO DE CONTROLE DA QUALIDADE DO CIMENTO



TIPO/CLASSE: CIII-40 RS GRANEL



FÁBRICA: FVI - FÁBRICA DE VITÓRIA - ES

MÊS/ANO: ABRIL/2026

ENSAIOS QUÍMICOS				ENSAIOS FÍSICOS E MECÂNICOS									
ENSAIOS	PERDA AO FOGO (PF)	RESÍDUO INSOLÚVEL (RI)	TRIOXÍDEO DE ENXÓFRE (SO ₃)	RESISTÊNCIA À COMPRESSÃO			FINURA			EXPANSIB. A QUENTE	TEMPO DE PEGA		CONSIST. NORMAL
				3 DIAS	7 DIAS	28 DIAS	BLAINE	#325	#200		INÍCIO	FIM	
UNIDADE	(%)	(%)	(%)	(MPa)	(MPa)	(MPa)	(cm ² /g)	(%)	(%)	(mm)	(min)	(min)	(%)
LIMITE NORMATIVO (ABNT NBR 16697:2018)	≤ 6,5	≤ 5,0	≤ 4,5	≥ 12,0	≥ 23,0	≥ 40,0	-	-	≤ 8,0	≤ 5	≥ 60	≤ 720	-
01/04/2026		0.73		26.8	35.5	48.7	4709	1.1	0.2	0.0	168	216	33.6
02/04/2026		0.74		25.0	35.3	47.4	4902	1.0	0.1	0.0	172	225	33.7
04/04/2026		0.40		25.7	34.8		4577	1.1	0.3	0.0	172	224	33.5
06/04/2026		0.54		25.4	34.9		4668	0.9	0.1	0.0	168	216	33.6
07/04/2026		0.55		24.5	34.2		4818	0.8	0.1	0.0	171	218	33.7
08/04/2026		0.61		24.1	35.1		4694	0.9	0.7	0.0	167	215	33.8
09/04/2026		0.69		24.0	35.6		4799	0.9	0.1	0.0	164	215	33.9
10/04/2026		0.71		25.4	35.2		4785	0.9	0.1	0.0	186	234	33.9
11/04/2026		0.72		25.0	34.4		4756	0.9	0.1	0.0	186	239	33.7
13/04/2026		0.56		23.3	33.9		4822	0.8	0.2	0.0	178	227	33.2
14/04/2026		0.75		24.8			4935	0.9	0.1	0.0	185	234	33.8
15/04/2026		0.68		24.2	35.5		4965	0.9	0.1	0.0	177	225	33.5
16/04/2026		0.67		23.7			4850	0.6	0.1	0.0	176	223	33.6
17/04/2026				25.4	32.0		4922	0.9	0.1	0.0	176	224	33.7
18/04/2026				26.5			4975	0.9	0.1	0.0	168	216	33.7
20/04/2026				22.4	32.0		4936	1.1	0.1	0.0	169	217	33.7
22/04/2026				23.3	34.8		4854	0.9	0.2	0.0	186	234	33.8
23/04/2026				25.6	34.7		4835	0.9	0.1	0.0	180	228	34.6
24/04/2026				23.3	32.1		4790	1.0	0.1	0.0	175	224	34.3
25/04/2026				24.9	33.4		4831	0.9	0.1	0.0	183	232	34.1
27/04/2026				23.1	34.7		4727	0.9	0.1	0.0	172	218	33.9
28/04/2026				25.1			4629	1.0	0.1	0.0	171	217	34.0
29/04/2026				25.8			4664	0.9	0.1	0.0	173	220	33.8
30/04/2026							4702	0.8	0.1	0.0	171	218	33.7
MÉDIA		0.64		24.7	34.3	48.1	4798	0.9	0.2	0.0	175	223	33.8
DESVIO PADRÃO		0.10		1.1	1.2	0.9	110	0.1	0.1	0.0	7	7	0.3
MÍNIMO		0.40		22.4	32.0	47.4	4577	0.6	0.1	0.0	164	215	33.2
MÁXIMO		0.75		26.8	35.6	48.7	4975	1.1	0.7	0.0	186	239	34.6

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