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Solution

GRADE 50 Solution.rmrsln

5MK GRADE 50_20230804_132926_G01_S01_M01-Evaluatio report (5MK GRADE 50_20230804_132926_G01_S01_M01)



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General information

Analysis date	2023-08-04 14:21:12	Measurement start time	2023-08-04 13:30:36
Analyst	Administrator	Operator	Administrator
Sample name	5MK GRADE 50	Comment	
Measured data name	C:\Users\Rigaku pc\Desktop\ANALYSIS\OGA\04-08-2023\5M...	Memo	

Peak list

No.	2 θ , °	d, Å	Height, cps	FWHM, °	Int. I., cps°	Int. W., °	Asymmetry	Decay(η L/mL)	Decay(η H/mH)	Size, Å
1	8.994(19)	9.82(2)	608(72)	0.131(16)	91(10)	0.15(3)	3(3)	0.0(4)	0.8(9)	637(76)
2	24.170(16)	3.679(2)	886(91)	0.087(17)	85(11)	0.10(2)	1.4(10)	0.0(6)	0.3(7)	974(185)
3	26.792(7)	3.3249(8)	6313(297)	0.121(5)	914(23)	0.145(11)	0.82(17)	0.61(14)	0.08(11)	705(30)
4	28.167(11)	3.1656(12)	529(64)	0.36(4)	255(27)	0.48(11)	4(3)	0.7(3)	0.0(8)	238(30)
5	29.53(2)	3.022(2)	609(72)	0.07(4)	80(11)	0.13(3)	0.6(12)	1.3(16)	1.5(7)	1319(734)
6	49.23(3)	1.8492(9)	343(50)	0.07(2)	26(9)	0.08(4)	1.1(16)	0.0(18)	0(2)	1291(403)
7	50.30(5)	1.8125(16)	254(38)	0.15(5)	41(13)	0.16(7)	1.2(14)	0.0(16)	0.0(18)	611(220)
8	60.11(2)	1.5381(6)	434(58)	0.13(2)	61(13)	0.14(5)	1.2(10)	0.0(10)	0.0(12)	723(122)
9	68.49(2)	1.3688(4)	314(45)	0.10(6)	62(12)	0.20(6)	1.9(19)	1.4(9)	1.4(12)	986(554)

No.	2 θ , °	Phase Name	Chemical Formula	Card No	Norm. I.	Profile Type	Distributi...	Degree of Orientation
1	8.994(19)	Biotite: 0 0 1	H4 K2 Mg6 Al2 Si6...	00-002-0057	9.96	Split pseudo-Voigt	-	-
2	24.170(16)	Osumilite: 2 0 2	K - Na - Ca - Mg -...	00-010-0413	9.35	Split pseudo-Voigt	-	-
3	26.792(7)	Quartz, syn: 0 1 1, Albite: 2 -2 -1	Si O2, Na Al Si3 O8	01-085-0865, 00-00...	100.00	Split pseudo-Voigt	-	-
4	28.167(11)	Osumilite: 2 1 1	K - Na - Ca - Mg -...	00-010-0413	27.90	Split pseudo-Voigt	-	-
5	29.53(2)	Albite: 1 -2 -2, Biotite: 0 3 0	Na Al Si3 O8, H4 K2...	00-003-0451, 00-00...	8.80	Split pseudo-Voigt	-	-
6	49.23(3)	Orthoclase: 3 3 1	Al2 O3 · K2 O · 6 Si...	00-002-0475	2.83	Split pseudo-Voigt	-	-
7	50.30(5)	Quartz, syn: 1 1 2, Orthoclase: 4...	Si O2, Al2 O3 · K2 O...	01-085-0865, 00-00...	4.43	Split pseudo-Voigt	-	-
8	60.11(2)	Quartz, syn: 1 2 1	Si O2	01-085-0865	6.70	Split pseudo-Voigt	-	-
9	68.49(2)	Quartz, syn: 0 3 1, Albite: 4 1 -5...	Si O2, Na Al Si3 O8,...	01-085-0865, 00-00...	6.74	Split pseudo-Voigt	-	-



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Phase name	Formula	Figure of merit	Phase reg. detail	Space Group	DB Card Number
Quartz, syn	Si O ₂	1.000	S/M(PDF-4 Minerals 2021)	154 : P3221	01-085-0865
Albite	Na Al Si ₃ O ₈	3.006	Import(PDF-4 Minerals 2021)	2 : P-1	00-003-0451
Orthoclase	Al ₂ O ₃ · K ₂ O · 6 Si O ₂	2.897	Import(PDF-4 Minerals 2021)	12 : C12/m1	00-002-0475
Biotite	H ₄ K ₂ Mg ₆ Al ₂ Si ₆ O ₂₄	2.317	Import(PDF-4 Minerals 2021)	10 : P12/m1	00-002-0057
Osumilite	K - Na - Ca - Mg - Fe - Al - S...	2.339	Import(PDF-4 Minerals 2021)	192 : P6/mcc	00-010-0413

No.	2θ, °	Ring Factor	β Cluster
1	8.994(19)	-	-
2	24.170(16)	-	-
3	26.792(7)	-	-
4	28.167(11)	-	-
5	29.53(2)	-	-
6	49.23(3)	-	-
7	50.30(5)	-	-
8	60.11(2)	-	-
9	68.49(2)	-	-

Qualitative Analysis Results



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Phase Data View

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