LAMPIRAN A

CONTOH PERHITUNGAN

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A.1 Perhitungan Nilai Konduktivitas

Sampel 8gr $KMnO_4$ 2jam waktu oksidasi

Thickness = 80 µm

Nilai *sheet r*esistance:

Titik Tengah = 793.8x10^3 Ω/*square*

Titik Pinggir 1 = 1157x10^3 Ω/*square*

Titik Pinggir 2 = 1445 x10^3 Ω/*square*

Titik Pinggir 3 = 1398 x10^3 Ω/*square*

Titik Pinggir 4 = 1298 x10^3 Ω/*square*

Nilai *sheet r*esistance rata-rata = 1190.96 x10^3 Ω/*square*

Nilai resistivitas $= \frac{sheet\ resistance\ x\ thickness}{1000}$

$= \frac{1190.96\ x\ 80}{1000}$

= 95.27

Nilai Konduktivitas Listik $= \frac{1}{\text{resistivitas}}$ x 1000

= 10.49 x 10^{-3} S/m

A.2 Perhitungan nilai d(hkl) dan ukuran kristalit (L)

Sample 8 gram $KMnO_4$ dengan waktu oksidasi 2 jam

Panjang gelombang = 3,84 Å

Sudut 2θ = 23,11°

FWHM (B) = 0,0786 rad

$$D = \frac{\lambda}{2 \sin \theta}$$

$$= \frac{3,84}{2 \sin (23,11)} = 48,66$$

LAMPIRAN B

DATA HASIL PENELITIAN

Tabel B.1 Nilai Hasil Pengujian FPP

No	$KMnO_4$	Ice bath	Sampel	*Sheet Resistance* (kΩ/sq)	Konduktivitas (mS/m)	Ketebalan	RESISTANSI
1	6	2	m1t1 IR	472,64	9,530519	222	104,9261
2	6	3	m1t2 IR	455	9,90001	222	101,01
3	6	4	m1t3 IR	868,98	5,183669	222	192,9136
4	8	2	m2t1 IR	1190,96	10,7576	80	95,2768
5	8	3	m2t2 IR	588,58	14,358	120	70,6296
6	8	4	m2t3 IR	350,2	36,456	80	28,016
7	10	2	m3t1 IR	178,8	66,046	90	16,092
8	10	3	m3t2 IR	282,06	61,046	60	16,9236
9	10	4	m3t3 IR	479,4	45,334	50	23,97
10	6	2	Standar	4856	1,029654	200	971,2

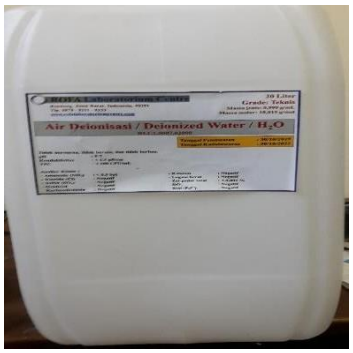
Tabel B.2 Data Pengujian Raman Spectroscopy

Sampel	*Raman Shift*		*Intensity (Counts)*		I_D/I_G
	D	G	I_D	I_G	
M1T1 IR	1345.31	1604.43	572.768	494.229	1.158
M2TI IR	1348.81	1601.90	507.024	470.008	1.078
M3T1 IR	1347.50	1594.30	421.472	447.251	0.942
M3T3 IR	1347.44	1606.96	237.332	195.328	1,215
STANDAR	1351.40	1595.96	349.094	349.311	0.999

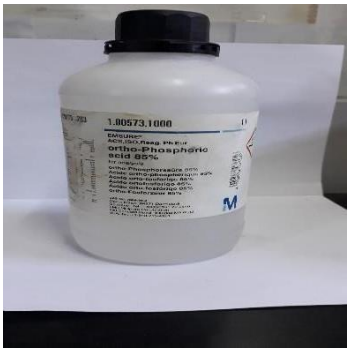
LAMPIRAN C
GAMBAR ALAT DAN BAHAN

C. GAMBAR ALAT DAN BAHAN

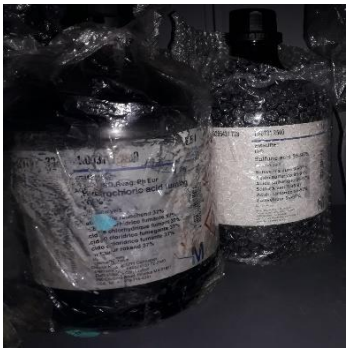
C.1 Gambar Alat dan Bahan



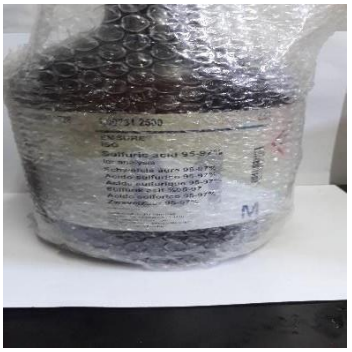
Gambar C.1 Air Deionisasi



Gambar C.2 Asam Fosfat

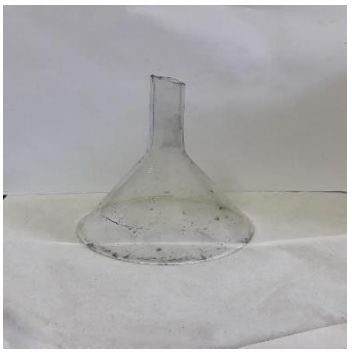


Gambar C.3 Asam Klorida



Gambar C.4 Asam Sulfat

Gambar C.5 Cawan Krusibel

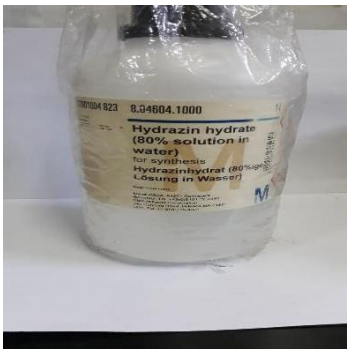


Gambar C.6 Corong

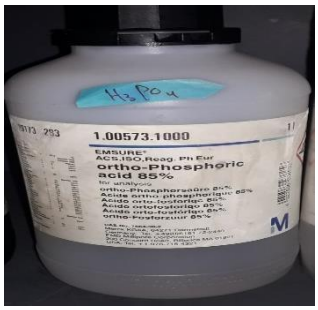
Gambar C.7 Gelas Beker

Gambar C.8 Gelas Ukur

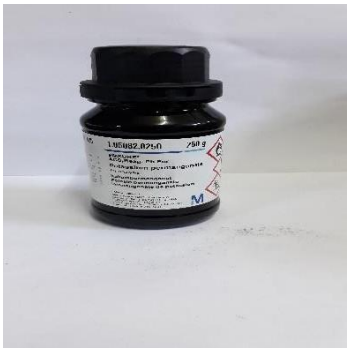
Gambar C.9 Grafit



Gambar C.10 Hidrazin Monohidrat



Gambar C.11 Hidrogen Peroksida



Gambar C.12 Kalium Permanganat

Gambar C.13 Kertas Lakmus

Gambar C.14 Kertas Saring

Gambar C.15 *Magnetic Stirrer*

Gambar C.16 Minyak

Gambar C.17 Neraca Digital

Gambar C.18 Oven

Gambar C.19 Pipet Tetes

Gambar C.20 Vakum Filtrasi