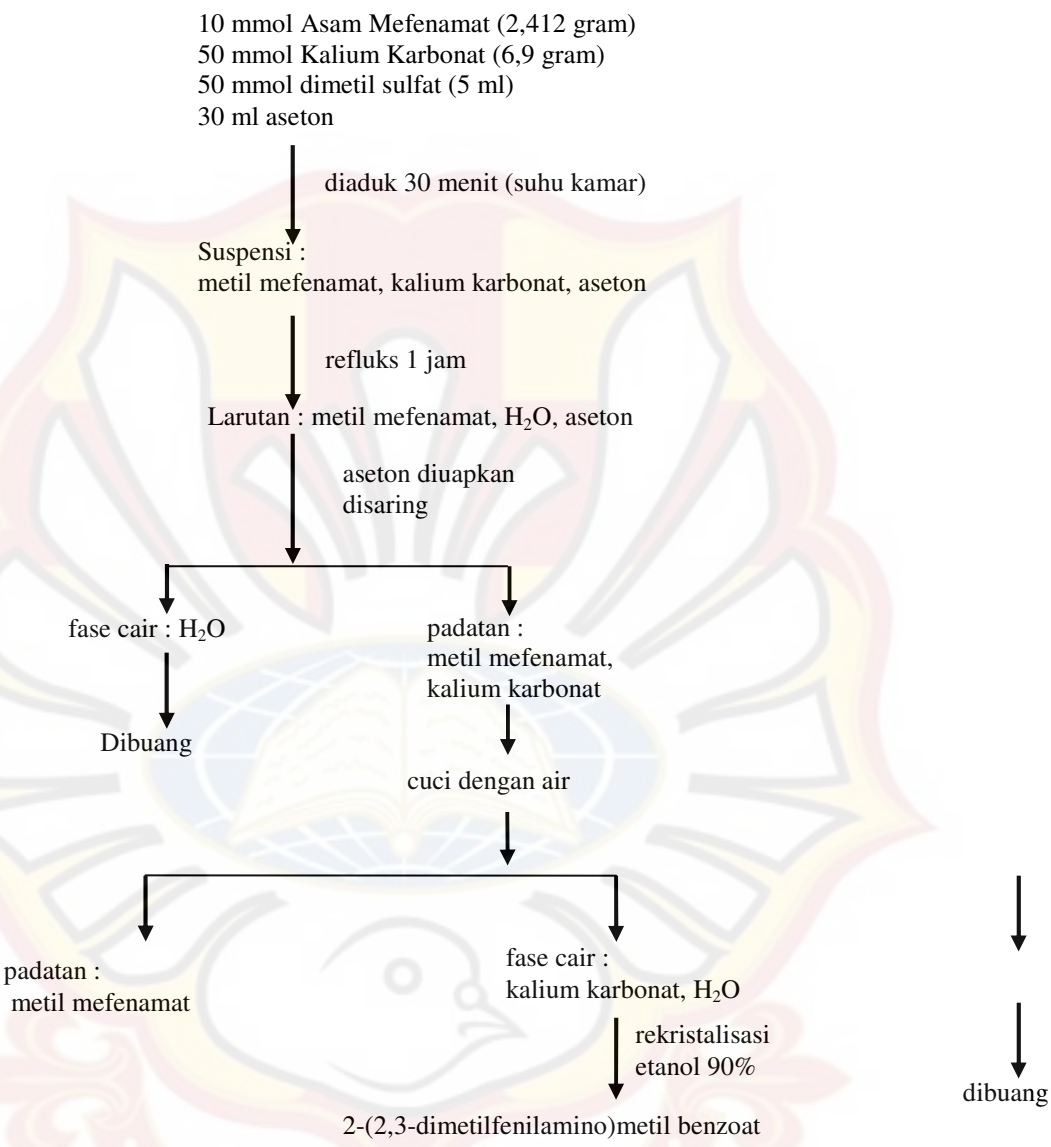
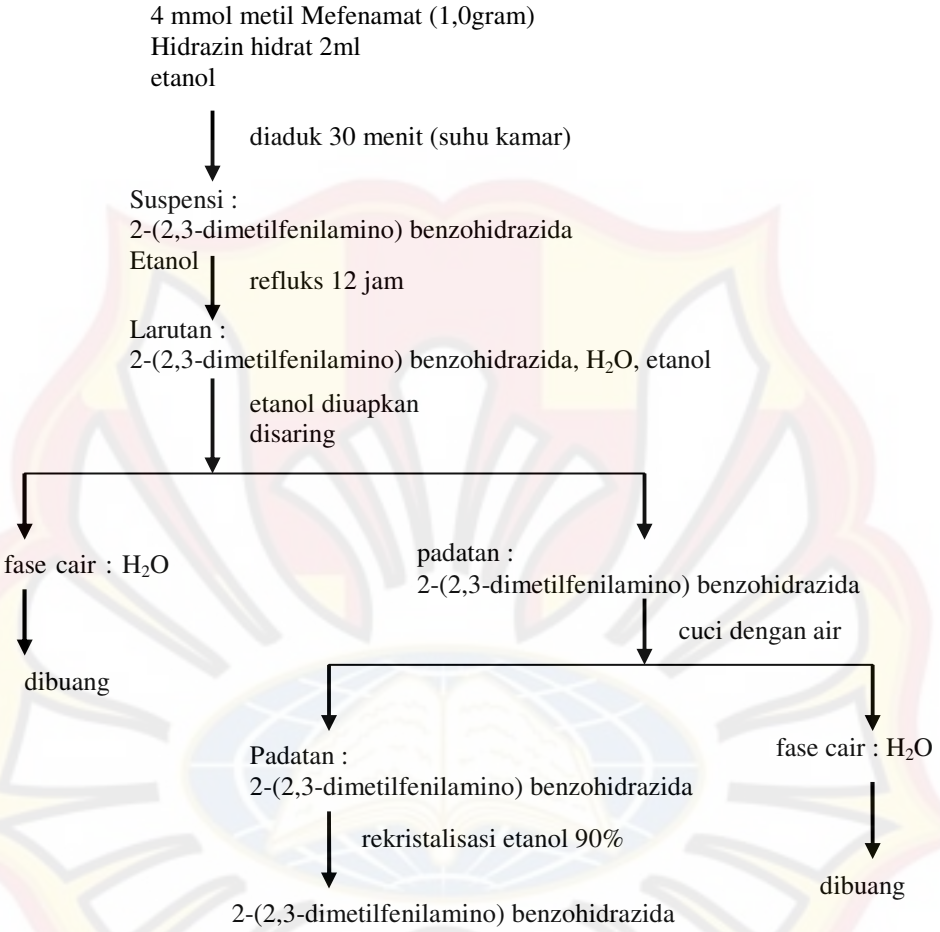
LAMPIRAN A

BAGAN ALIR SINTESIS 2-(2,3-DIMETILFENILAMINO)METIL BENZOAT



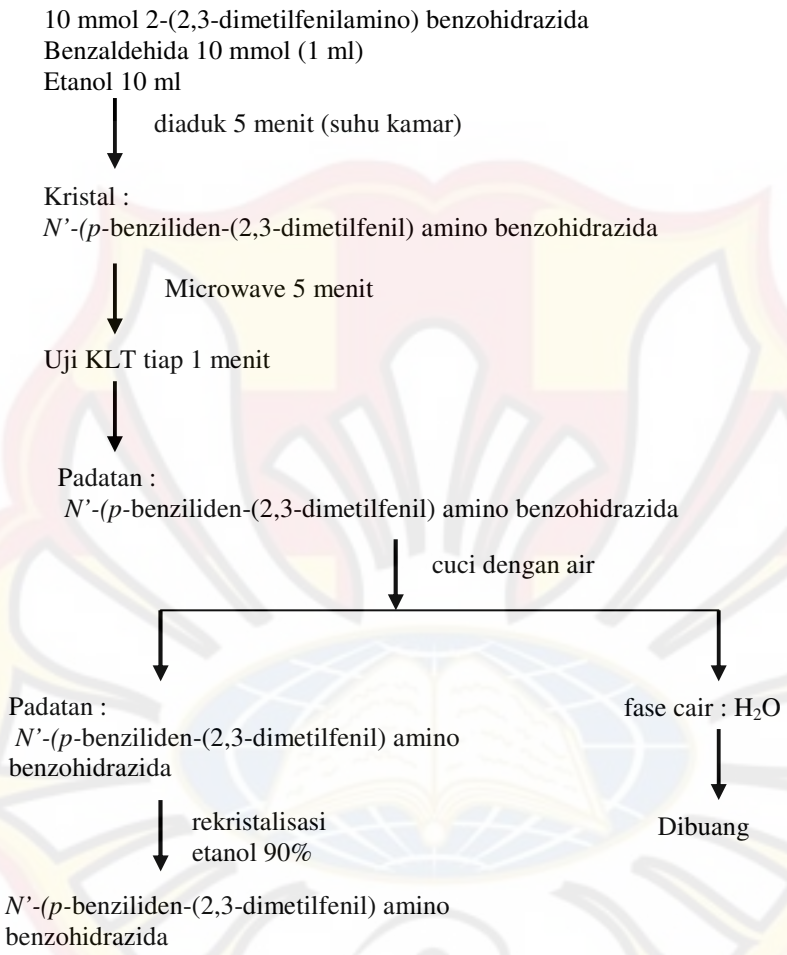
LAMPIRAN B

BAGAN ALIR SINTESIS 2-(2,3-DIMETILFENILAMINO) BENZOHIDRAZIDA



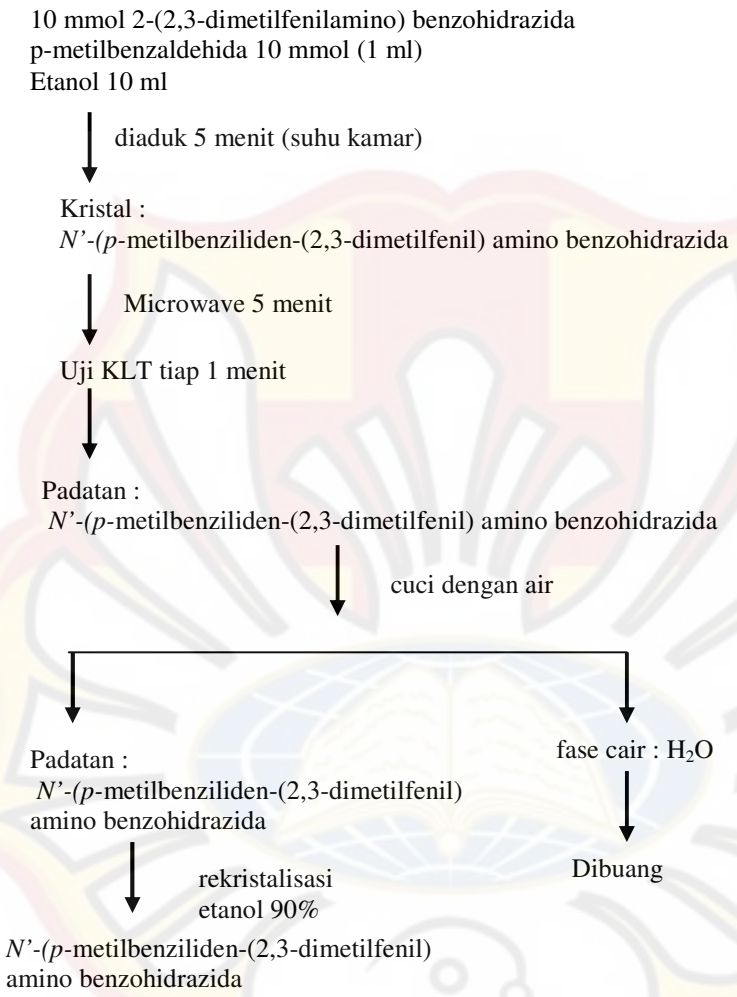
LAMPIRAN C

BAGAN ALIR SINTESIS *N'*-(*P*-BENZILIDEN-2,3-DIMETILFENIL) AMINO BENZOHIDRAZIDA



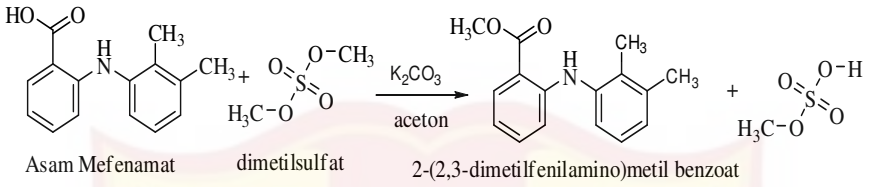
LAMPIRAN D

BAGAN ALIR SINTESIS *N*'-(*P*-METILBENZILIDEN-2,3-DIMETILFENIL) AMINO BENZOHIDRAZIDA



LAMPIRAN E

PERHITUNGAN HASIL SINTESIS 2-(2,3-DIMETILFENILAMINO)METIL BENZOAT



Asam Mefenamat dimetilsulfat 2-(2,3-dimetilfenilamino)metil benzoat

Berat molekul Asam Mefenamat = 241,2 g/mol

n = g/BM

0,01mol = g/241,2g/mol

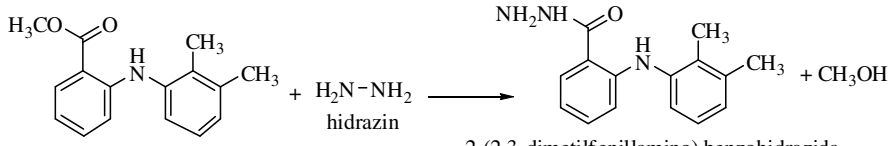
G = 2,412 g

Berat Molekul Dimetilsulfat = 126 g/mol

BJ = 1,325 g/ml ⟶ vol = G/1,325

G = 6,3 g = 44,75 ml ≈ 5,0 ml

LAMPIRAN F
PERHITUNGAN HASIL SINTESIS 2-(2,3-DIMETILFENILAMINO) BENZOHIDRAZIDA



2-(2,3-dimetilfenilamino)metil benzoat

2-(2,3-dimetilfenillamino) benzohidrazida

Berat molekul 2-(2,3-dimetilfenilamino) benzohidrazida = 255 g/mol

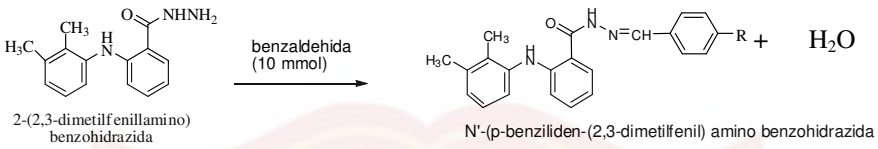
N = g/BM

0,004 mol = g/255 g/mol

G = 1,02 g

LAMPIRAN G

PERHITUNGAN HASIL SINTESIS *N*'(*P*-BENZILIDEN-(2,3-DIMETILFENIL) AMINO BENZOHIDRAZIDA



2-(2,3-dimetilfenillamino) benzohidrazida

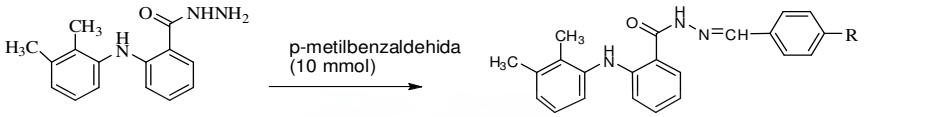
N'-(p-benziliden-(2,3-dimetilfenil) amino benzohidrazida

Berat molekul 2-(2,3-dimetilfenilamino) benzohidrazida = 255 g/mol

N = g/BM

0,01 mol = g/255 g/mol
G = 2,55 g
Berat molekul benzaldehida = 106,12 g/mol
N = g/mol
0,01 mol = g/106,12 g/mol
G = 1,06 g ≈ 1,06 ml

LAMPIRAN H
PERHITUNGAN HASIL SINTESIS *N*'(*P*-METILBENZILIDEN-(2,3-DIMETILFENIL) AMINO BENZOHIDRAZIDA



2-(2,3-dimetilfenillamino) benzohidrazida

N'-(p-metilbenziliden-(2,3-dimetilfenil) amino benzohidrazida

LAMPIRAN I

PERHITUNGAN RANDEMEN HASIL 2-(2,3-DIMETILFENILAMINO)METIL BENZOAT

$$\text{Randemen hasil} = \frac{\text{berat praktis}}{\text{berat teoritis}} \times 100\ \%$$

a. 2-(2,3-dimetilfenilamino) metil benzoat

Sintesis 1 : berat praktis = 2,26 g

Berat teoritis = 2,55 g

Presentase hasil

$$= \frac{2,26}{2,55} \times 100\ \% = 88,63\ \%$$

Sintesis II : presentase hasil = 85,49 % (2,18 g)

Sintesis III : presentase hasil = 86,66 % (2,21 g)

$$\text{Presentase hasil rata-rata} : \frac{88,63\ \% + 85,49\ \% + 86,66\ \%}{3} = 86,93\ \%$$

LAMPIRAN J
PERHITUNGAN RANDEMEN HASIL 2-(2,3-DIMETILFENILAMINO) BENZOHIDRAZIDA

Randemen hasil = $\frac{\text{berat praktis}}{\text{berat teoritis}} \times 100\ \%$

b. 2-(2,3-dimetilfenilamino) benzohidrazida

Sintesis I : berat praktis = 0,78 g

Berat teoritis = 1,02 g

Presentase hasil

$= \frac{0,78}{1,02} \times 100\ \% = 76\ \%$

Sintesis II : presentase hasil = 73 % (0,75 g)

Sintesis III : presentase hasil = 68 % (0,70 g)

Presentase hasil rata-rata : $\frac{76\ \% + 73\ \% + 68\ \%}{3} = 72\ \%$

LAMPIRAN K
PERHITUNGAN RANDEMEN HASIL *N*'-(*P*-BENZILIDEN-(2,3-DIMETILFENIL) AMINO BENZOHIDRAZIDA

Randemen hasil = $\frac{\text{berat praktis}}{\text{berat teoritis}} \times 100\ \%$

c. *N*'-(*p*-benziliden-(2,3-dimetilfenil)amino benzohidrazida

Sintesis I : berat praktis = 2,52 g

Berat teoritis = 3,32 g

Presentase hasil

$= \frac{2,52}{3,32} \times 100\ \% = 76\ \%$

Sintesis II : presentase hasil = 75 % (2,48 g)

Sintesis III : presentase hasil = 70 % (2,35 g)

Presentase hasil rata-rata : $\frac{76\ \% + 75\% + 70\ \%}{3} = 74\ \%$

LAMPIRAN L
PERHITUNGAN RANDEMEN HASIL *N*'-(*P*-METILBENZILIDEN-(2,3-DIMETILFENIL) AMINO BENZOHIDRAZIDA

Randemen hasil = $\frac{\text{berat praktis}}{\text{berat teoritis}} \times 100\ \%$

a. *N*'-(*p*-benziliden-(2,3-dimetilfenil)amino benzohidrazida

Sintesis I : berat praktis = 4,39 g

Berat teoritis = 4,21 g

Presentase hasil

$= \frac{4,39}{4,21} \times 100\ \% = 82\ \%$

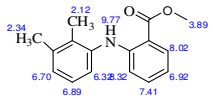
Sintesis II : presentase hasil = 86 % (4,21 g)

Sintesis III : presentase hasil = 83 % (4,34 g)

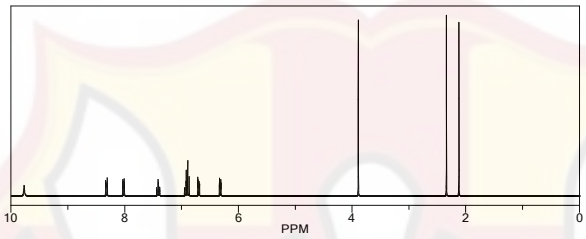
Presentase hasil rata-rata : $\frac{82\ \% + 86\ \% + 83\ \%}{3} = 84\ \%$

LAMPIRAN M
DATA ESTIMASI SENYAWA 2-(2,3-DIMETILFENILAMINO)METIL BENZOAT

ChemNMR ^{1}H Estimation



Estimation quality is indicated by color: good, medium, rough

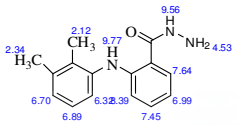


Protocol of the H-1 NMR Prediction:

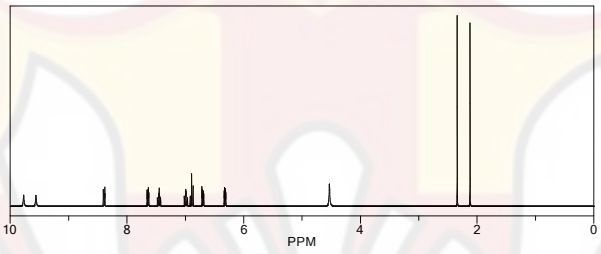
Node	Shift	Base + Inc.	Comment (ppm rel. to TMS)
NH	9,77	4,00	aromatic C-NH
		5,77	general corrections
CH	6,32	7,26	1-benzene
		-0,80	1 -N
		-0,12	1 -C
		-0,19	1 -C
		0,17	general corrections
CH	8,32	7,26	1-benzene
		-0,80	1 -N
		0,11	1 -C(=O)OC
		1,75	general corrections
CH	8,02	7,26	1-benzene
		-0,25	1 -N
		0,71	1 -C(=O)OC
		0,30	general corrections
CH	6,70	7,26	1-benzene
		-0,64	1 -N
		-0,12	1 -C
		-0,20	1 -C
		0,40	general corrections
CH	6,89	7,26	1-benzene
		-0,25	1 -N
		-0,19	1 -C
		-0,12	1 -C
		0,19	general corrections
CH	7,41	7,26	1-benzene
		-0,25	1 -N
		0,21	1 -C(=O)OC
		0,19	general corrections
CH	6,92	7,26	1-benzene
		-0,64	1 -N
		0,11	1 -C(=O)OC
		0,19	general corrections
CH3	3,89	0,86	methyl
		3,02	1 alpha -OC(=O)-1:C*C*C*C*C*C*1
		0,01	general corrections
CH3	2,12	0,86	methyl
		1,49	1 alpha -1:C*C*C*C*C*C*1
		-0,23	general corrections
CH3	2,34	0,86	methyl
		1,49	1 alpha -1:C*C*C*C*C*C*1
		-0,01	general corrections

LAMPIRAN N
DATA ESTIMASI 2-(2,3-DIMETILFENILAMINO) BENZOHIDRAZIDA

ChemNMR ^{1}H Estimation



Estimation quality is indicated by color: good, medium, rough

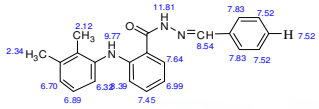


Protocol of the H-1 NMR Prediction:

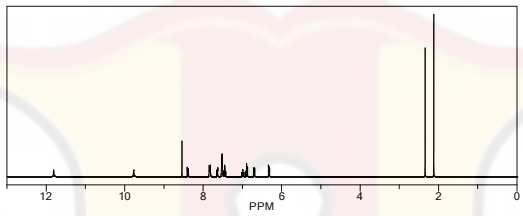
Node	Shift	Base + Inc.	Comment (ppm rel. to TMS)
NH 9,56		8,00	sec. amide
		1,56	general corrections
NH2 4,53		2,00	amine
		2,53	general corrections
NH 9,77		4,00	aromatic C-NH
		5,77	general corrections
CH 6,32		7,26	1-benzene
		-0,80	1 -N
		-0,12	1 -C
		-0,19	1 -C
		0,17	general corrections
CH 8,39		7,26	1-benzene
		-0,80	1 -N
		0,18	1 -C(=O)N
		1,75	general corrections
CH 7,64		7,26	1-benzene
		-0,25	1 -N
		0,69	1 -C(=O)N
		-0,06	general corrections
CH 6,70		7,26	1-benzene
		-0,64	1 -N
		-0,12	1 -C
		-0,20	1 -C
		0,40	general corrections
CH 6,89		7,26	1-benzene
		-0,25	1 -N
		-0,19	1 -C
		-0,12	1 -C
		0,19	general corrections
CH 7,45		7,26	1-benzene
		-0,25	1 -N
		0,25	1 -C(=O)N
		0,19	general corrections
CH 6,99		7,26	1-benzene
		-0,64	1 -N
		0,18	1 -C(=O)N
		0,19	general corrections
CH3 2,12		0,86	methyl
		1,49	1 alpha -1:C*C*C*C*C*C*1
		-0,23	general corrections
CH3 2,34		0,86	methyl
		1,49	1 alpha -1:C*C*C*C*C*C*1
		-0,01	general corrections

LAMPIRAN O
DATA ESTIMASI *N'*-(*P*-BENZILIDEN-2,3-DIMETILFENIL) AMINO BENZOHIDRAZIDA

ChemNMR ^{1}H Estimation



Estimation quality is indicated by color: good, medium, rough

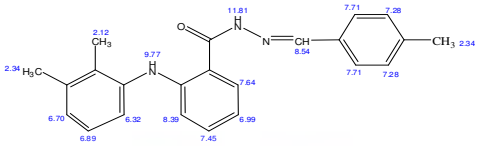


Protocol of the H-1 NMR Prediction:

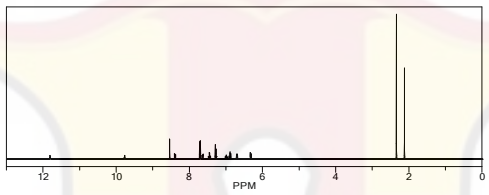
Node	Shift	Base + Inc.	Comment (ppm rel. to TMS)
NH	11,81	8,00	sec. amide
		3,81	general corrections
NH	9,77	4,00	aromatic C-NH
		5,77	general corrections
CH	6,32	7,26	1-benzene
		-0,80	1 -N
		-0,12	1 -C
		-0,19	1 -C
		0,17	general corrections
CH	8,39	7,26	1-benzene
		-0,80	1 -N
		0,18	1 -C(=O)N
		1,75	general corrections
CH	7,64	7,26	1-benzene
		-0,25	1 -N
		0,69	1 -C(=O)N
		-0,06	general corrections
CH	7,83	7,62	benzylidenimin
		?	1 unknown substituent(s)
		0,21	general corrections
CH	7,52	7,29	benzylidenimin
		?	1 unknown substituent(s)
		0,23	general corrections
CH	7,83	7,62	benzylidenimin
		?	1 unknown substituent(s)
		0,21	general corrections
CH	6,70	7,26	1-benzene
		-0,64	1 -N
		-0,12	1 -C
		-0,20	1 -C
		0,40	general corrections
CH	7,52	7,29	benzylidenimin
		?	1 unknown substituent(s)
		0,23	general corrections
CH	6,89	7,26	1-benzene
		-0,25	1 -N
		-0,19	1 -C
		-0,12	1 -C
		0,19	general corrections
CH	7,45	7,26	1-benzene
		-0,25	1 -N
		0,25	1 -C(=O)N
		0,19	general corrections
CH	6,99	7,26	1-benzene
		-0,64	1 -N
		0,18	1 -C(=O)N
		0,19	general corrections
CH	8,54	8,11	benzylidenimin
		?	1 unknown substituent(s)
		0,43	general corrections
CH3	2,12	0,86	methyl
		1,49	1 alpha -1:C*C*C*C*C*C*1
		-0,23	general corrections
CH3	2,34	0,86	methyl
		1,49	1 alpha -1:C*C*C*C*C*C*1
		-0,01	general corrections
H	7,52	7,29	benzylidenimin
		?	1 unknown substituent(s)
		0,23	general corrections

LAMPIRAN P
DATA ESTIMASI *N*'-(*P*-METILBENZILIDEN-2,3-DIMETILFENIL) AMINO BENZOHIDRAZIDA

ChemNMR ^{1}H Estimation



Estimation quality is indicated by color: good, medium, rough



Protocol of the H-1 NMR Prediction:

Node	Shift	Base + Inc.	Comment (ppm rel. to TMS)
NH	11.81	8.00	sec. amide
		3.81	general corrections
NH	9.77	4.00	aromatic C-NH
		5.77	general corrections
CH	6.32	7.26	1-benzene
		-0.80	1 -N
		-0.12	1 -C
		-0.19	1 -C
		0.17	general corrections
CH	8.39	7.26	1-benzene
		-0.80	1 -N
		0.18	1 -C(=O)N
		1.75	general corrections
CH	7.64	7.26	1-benzene
		-0.25	1 -N
		0.69	1 -C(=O)N
		-0.06	general corrections
CH	7.71	7.62	benzylidenimin
		?	1 unknown substituent(s)
		-0.12	1 -C from 1-benzene
		0.21	general corrections
CH	7.28	7.29	benzylidenimin
		?	1 unknown substituent(s)
		-0.20	1 -C from 1-benzene
		0.19	general corrections
CH	7.71	7.62	benzylidenimin
		?	1 unknown substituent(s)
		-0.12	1 -C from 1-benzene
		0.21	general corrections
CH	7.28	7.29	benzylidenimin
		?	1 unknown substituent(s)
		-0.20	1 -C from 1-benzene
		0.19	general corrections
CH	6.70	7.26	1-benzene
		-0.64	1 -N
		-0.12	1 -C
		-0.20	1 -C
		0.40	general corrections
CH	6.89	7.26	1-benzene
		-0.25	1 -N
		-0.19	1 -C
		-0.12	1 -C
		0.19	general corrections
CH	7.45	7.26	1-benzene
		-0.25	1 -N
		0.25	1 -C(=O)N
		0.19	general corrections
CH	6.99	7.26	1-benzene
		-0.64	1 -N
		0.18	1 -C(=O)N
		0.19	general corrections
CH	8.54	8.11	benzylidenimin
		?	1 unknown substituent(s)
		0.43	general corrections
CH3	2.12	0.86	methyl
		1.49	1 alpha -1:C*C*C*C*C*C*1
		-0.23	general corrections
CH3	2.34	0.86	methyl
		1.49	1 alpha -1:C*C*C*C*C*C*1
		-0.01	general corrections
CH3	2.34	0.86	methyl
		1.49	1 alpha -1:C*C*C*C*C*C*1
		-0.01	general corrections