

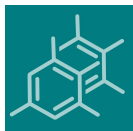
Chemical Compounds Characterization Checklist

Manuscript ID: _____

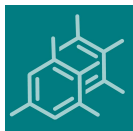
Submitting Author: Xixian Cao, Jun You *, Yunze Wang, Yanchao Yu, Wenju Wu and _____

Compound			Characterization											
Compound Nr.	New	Known (Ref. in main text)	Physical State (purity %)	¹ H NMR	¹³ C NMR	2D NMR	HRMS	IR	XRD	GC/HPLC				Data in SI
1	☐	[8]	solid	☒	☒	☐	☐	☒	☐	☐	☐	☐	☐	☒
2	☒		solid	☒	☒	☐	☒	☒	☐	☐	☐	☐	☐	☒
3	☒		solid	☒	☒	☐	☒	☒	☐	☐	☐	☐	☐	☒
4	☒		solid	☒	☒	☐	☒	☒	☐	☐	☐	☐	☐	☒
5	☒		solid	☒	☒	☐	☒	☒	☐	☐	☐	☐	☐	☒
6	☒		solid	☒	☒	☐	☒	☒	☒	☐	☐	☐	☐	☒
7	☒		oily liquid	☒	☒	☐	☒	☒	☐	☐	☐	☐	☐	☒
8	☒		oily liquid	☒	☒	☐	☒	☒	☐	☐	☐	☐	☐	☒
9	☒		oily liquid	☒	☒	☐	☒	☒	☐	☐	☐	☐	☐	☒
10	☒		oily liquid	☒	☒	☐	☒	☒	☐	☐	☐	☐	☐	☒
11	☒		oily liquid	☒	☒	☐	☒	☒	☐	☐	☐	☐	☐	☒
12	☒		oily liquid	☒	☒	☐	☒	☒	☐	☐	☐	☐	☐	☒

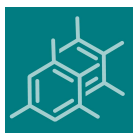
Note: insert the relevant information and select only the techniques used in this study. In the empty columns you can insert any additional methods.



Compound			Characterization											
Compound Nr.	New	Known (Ref. in main text)	Physical State (purity %)	¹ H NMR	¹³ C NMR	2D NMR	HRMS	IR	XRD	GC/HPLC				Data in SI
13	☒		oily liquid	☒	☒	☐	☒	☒	☐	☐	☐	☐	☐	☒
14	☒		oily liquid	☒	☒	☐	☒	☒	☐	☐	☐	☐	☐	☒
15	☒		oily liquid	☒	☒	☐	☒	☒	☐	☐	☐	☐	☐	☒
16	☒		oily liquid	☒	☒	☐	☒	☒	☐	☐	☐	☐	☐	☒
17	☒		oily liquid	☒	☒	☐	☒	☒	☐	☐	☐	☐	☐	☒
18	☒		oily liquid	☒	☒	☐	☒	☒	☐	☐	☐	☐	☐	☒
19	☒		oily liquid	☒	☒	☐	☒	☒	☐	☐	☐	☐	☐	☒
20	☒		oily liquid	☒	☒	☐	☒	☒	☐	☐	☐	☐	☐	☒
21	☒		oily liquid	☒	☒	☐	☒	☒	☐	☐	☐	☐	☐	☒
22	☒		oily liquid	☒	☒	☐	☒	☒	☐	☐	☐	☐	☐	☒
23	☒		oily liquid	☒	☒	☐	☒	☒	☐	☐	☐	☐	☐	☒
24	☒		oily liquid	☒	☒	☐	☒	☒	☐	☐	☐	☐	☐	☒
25	☒		oily liquid	☒	☒	☐	☒	☒	☐	☐	☐	☐	☐	☒
26	☒		oily liquid	☒	☒	☐	☒	☒	☐	☐	☐	☐	☐	☒
27	☒		oily liquid	☒	☒	☐	☒	☒	☐	☐	☐	☐	☐	☒
28	☒		oily liquid	☒	☒	☐	☒	☒	☐	☐	☐	☐	☐	☒



Compound			Characterization											
Compound Nr.	New	Known (Ref. in main text)	Physical State (purity %)	¹ H NMR	¹³ C NMR	2D NMR	HRMS	IR	XRD	GC/HPLC				Data in SI
29	☒		solid	☒	☒	☐	☒	☒	☐	☐	☐	☐	☐	☒
30	☒		solid	☒	☒	☐	☒	☒	☐	☐	☐	☐	☐	☒
31	☒		solid	☒	☒	☐	☒	☒	☐	☐	☐	☐	☐	☒
32	☒		solid	☒	☒	☐	☒	☒	☐	☐	☐	☐	☐	☒
33	☒		solid	☒	☒	☐	☒	☒	☐	☐	☐	☐	☐	☒
34	☒		solid	☒	☒	☐	☒	☒	☐	☐	☐	☐	☐	☒
35	☒		oily liquid	☒	☒	☐	☒	☒	☐	☐	☐	☐	☐	☒
36	☒		oily liquid	☒	☒	☐	☒	☒	☐	☐	☐	☐	☐	☒
37	☒		oily liquid	☒	☒	☐	☒	☒	☐	☐	☐	☐	☐	☒
38	☒		oily liquid	☒	☒	☐	☒	☒	☐	☐	☐	☐	☐	☒
39	☒		oily liquid	☒	☒	☐	☒	☒	☐	☐	☐	☐	☐	☒
40	☒		oily liquid	☒	☒	☐	☒	☒	☐	☐	☐	☐	☐	☒
	☐			☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	☐			☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	☐			☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	☐			☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐



Compound			Characterization											
Compound Nr.	New	Known (Ref. in main text)	Physical State (purity %)	¹ H NMR	¹³ C NMR	2D NMR	HRMS	IR	XRD	GC/HPLC				Data in SI
	☐			☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	☐			☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	☐			☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	☐			☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	☐			☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	☐			☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	☐			☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	☐			☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	☐			☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	☐			☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	☐			☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	☐			☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	☐			☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	☐			☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	☐			☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	☐			☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	☐			☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	☐			☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	☐			☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	☐			☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

[illegible]