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附錄一、藻類毒性試驗原始數據

實驗毒物： acrylonitrile 初始細胞密度(cells/mL)： 15000

MCV (μm3)： 42.89 D (μm)： 4.343 Initial pH： 7.54 EDTA(%)： 0

T(°C)： 24 Test duration： 48-h

Conc	Initial DO	Final DO	Final cells	Delta DO		IR		IR	IR
mg/L	mg/L	mg/L	cells/ml	mg/L	μspecific	μrelative (growth rate)	(Biomass)	(DO)	
Control	1.78	11.49	286500	9.71	1.474844	1	0	0	0
46.65	2.29	3.67	31500	1.38	0.370969	0.25153	0.74847	0.93923	0.85788
23.33	1.85	3.58	54500	1.73	0.645075	0.43739	0.56261	0.85451	0.82183
11.66	1.95	6.37	90200	4.42	0.896990	0.60819	0.39181	0.72302	0.54480
5.83	1.64	7.22	135300	5.58	1.099722	0.74565	0.25435	0.55691	0.42533
2.97	1.71	7.91	178100	6.2	1.237147	0.83883	0.16117	0.39926	0.36148
1.46	1.72	9.05	268500	7.33	1.442400	0.97800	0.02200	0.06630	0.24511
Control	1.46	11.21	300000	9.75	1.497866	1	0	0	0
46.65	2.63	4.08	21800	1.45	0.186930	0.12480	0.87520	0.97614	0.85128
23.33	1.79	4.18	61700	2.39	0.707117	0.47208	0.52792	0.83614	0.75487
11.66	1.63	6.06	85400	4.43	0.869648	0.58059	0.41941	0.75298	0.54564
5.83	1.46	6.87	153500	5.41	1.162825	0.77632	0.22368	0.51404	0.44513
2.97	1.47	7.56	186900	6.09	1.261262	0.84204	0.15796	0.39684	0.37538
1.46	1.71	9.59	279200	7.88	1.461939	0.97601	0.02399	0.07298	0.19179
Control	1.54	11.31	253300	9.77	1.413262	1	0	0	0
46.65	2.31	3.98	26300	1.67	0.280759	0.19866	0.80134	0.95258	0.82907
23.33	1.91	4.25	75500	2.34	0.808041	0.57176	0.42824	0.74612	0.76049
11.66	1.74	5.97	93500	4.23	0.914956	0.64741	0.35259	0.67058	0.56704
5.83	1.81	6.88	134100	5.07	1.095268	0.77499	0.22501	0.50021	0.48106
2.97	1.71	7.91	199700	6.2	1.294383	0.91588	0.08412	0.22493	0.36540
1.46	1.74	8.99	240200	7.25	1.386711	0.98121	0.01879	0.05497	0.25793
Control	1.5933	11.33667	279933.33	9.74333	1.461991	1	0	0	0
46.65	2.4100	3.91000	26533.33	1.50000	0.279553	0.19166	0.80511	0.95647	0.84605
23.33	1.8500	4.00333	63900.00	2.15333	0.720078	0.49374	0.50478	0.81543	0.77899
11.66	1.7733	6.13333	89700.00	4.36000	0.893864	0.61206	0.38889	0.71804	0.55251
5.83	1.6367	6.99000	140966.67	5.35333	1.119272	0.76566	0.23442	0.52453	0.45056
2.97	1.6300	7.79333	188233.33	6.16333	1.264264	0.86558	0.13561	0.34612	0.36743
1.46	1.7233	9.21000	262633.33	7.48667	1.430350	0.97841	0.02180	0.06530	0.23161

實驗毒物：2-chloroacrylonitrile 初始細胞密度(cells/mL)： 15000

MCV (μm³)： 40.28 D (μm)： 4.355 Initial pH： 7.44 EDTA(%)： 0
T(°C)： 24 Test duration： 48-h

Conc	Initial DO	Final DO	Final cells	Delta DO			IR	IR	IR
mg/L	mg/L	mg/L	cells/ml	mg/L	μspecific	μrelative (growth rate)	(Biomass)	(DO)	
Control	1.74	5.96	234500	4.22	1.374703	1	0	0	0
0.443	1.38	1.81	16500	0.43	0.047655	0.03467	0.96533	0.99317	0.89810
0.292	1.04	2.23	32600	1.19	0.388131	0.28234	0.71766	0.91982	0.71801
0.194	1.23	2.68	62400	1.45	0.712758	0.51848	0.48152	0.78405	0.65640
0.132	1.32	3.91	100300	2.59	0.950058	0.69110	0.30890	0.61139	0.38626
0.089	1.21	4.75	154900	3.54	1.167365	0.84918	0.15082	0.36264	0.16114
0.059	1.32	5.71	188600	4.39	1.265789	0.92077	0.07923	0.20911	-0.04028
Control	1.12	6.24	258600	5.12	1.423616	1	0	0	0
0.443	1.65	1.7	19000	0.05	0.118194	0.08302	0.91698	0.98358	0.99023
0.292	0.91	2.39	39700	1.48	0.486650	0.34184	0.65816	0.89860	0.71094
0.194	1.1	2.83	70100	1.73	0.770936	0.54153	0.45847	0.77381	0.66211
0.132	1.23	3.73	107300	2.5	0.983789	0.69105	0.30895	0.62110	0.51172
0.089	1.28	4.35	144700	3.07	1.133306	0.79608	0.20392	0.46757	0.40039
0.059	1.45	6.12	200100	4.67	1.295384	0.90992	0.09008	0.24015	0.08789
Control	0.88	5.92	239900	5.04	1.386086	1	0	0	0
0.443	2.07	2.44	15700	0.37	0.022805	0.01645	0.98355	0.99689	0.92659
0.292	1.15	1.82	26600	0.67	0.286431	0.20665	0.79335	0.94842	0.86706
0.194	1.33	2.92	60500	1.59	0.697297	0.50307	0.49693	0.79769	0.68452
0.132	1.03	3.82	92700	2.79	0.910659	0.65700	0.34300	0.65451	0.44643
0.089	1.1	4.68	158500	3.58	1.178852	0.85049	0.14951	0.36194	0.28968
0.059	1.41	5.8	195900	4.39	1.284777	0.92691	0.07309	0.19564	0.12897
Control	1.2467	6.04000	244333.33	4.79333	1.394802	1	0	0	0
0.443	1.7000	1.98333	17066.67	0.28333	0.062885	0.04471	0.95374	0.99099	0.94089
0.292	1.0333	2.14667	32966.67	1.11333	0.387071	0.27694	0.71781	0.92166	0.76773
0.194	1.2200	2.81000	64333.33	1.59000	0.726997	0.52103	0.47822	0.78488	0.66829
0.132	1.1933	3.82000	100100.00	2.62667	0.948169	0.67972	0.31979	0.62892	0.45202
0.089	1.1967	4.59333	152700.00	3.39667	1.159841	0.83191	0.16845	0.39956	0.29138
0.059	1.3933	5.87667	194866.67	4.48333	1.281983	0.91920	0.08107	0.21570	0.06467

實驗毒物：methacrylonitrile 初始細胞密度(cells/mL)：15000

MCV (μm³)：40.12 D (μm)：4.343 Initial pH：7.50 EDTA(%)：0

T(°C)：24 Test duration：48-h

Conc	Initial DO	Final DO	Final cells	Delta DO		IR		IR	IR
mg/L	mg/L	mg/L	cells/ml	mg/L	μspecific	μrelative (growth rate)	(Biomass)	(DO)	
Control	2.35	8.37	300200	6.02	1.498199	1	0	0	0
1227.52	2.97	4.02	58600	1.05	0.681342	0.45477	0.54523	0.84712	0.82558
613.76	2.42	5.62	121100	3.2	1.044283	0.69703	0.30297	0.62798	0.46844
306.88	2.12	6.15	156100	4.03	1.171223	0.78175	0.21825	0.50526	0.33056
153.44	1.98	6.24	188200	4.26	1.264728	0.84417	0.15583	0.39271	0.29236
76.72	2.05	6.8	214400	4.75	1.329897	0.88766	0.11234	0.30084	0.21096
38.36	2.17	7.63	266900	5.46	1.439412	0.96076	0.03924	0.11676	0.09302
Control	2	8.51	313200	6.51	1.519396	1	0	0	0
1227.52	2.83	4.91	60000	2.08	0.693147	0.45620	0.54380	0.84909	0.68049
613.76	2.33	6.05	101200	3.72	0.954524	0.62823	0.37177	0.71093	0.42857
306.88	2	6.82	166100	4.82	1.202270	0.79128	0.20872	0.49329	0.25960
153.44	1.86	6.71	188500	4.85	1.265524	0.83291	0.16709	0.41818	0.25499
76.72	2.03	7.02	196200	4.99	1.285542	0.84609	0.15391	0.39235	0.23349
38.36	2.11	8	243200	5.89	1.392917	0.91676	0.08324	0.23474	0.09524
Control	2	8.12	308800	6.12	1.512322	1	0	0	0
1227.52	2.83	4.62	50800	1.79	0.609923	0.40330	0.59670	0.87815	0.70752
613.76	2.33	5.46	117700	3.13	1.030044	0.68110	0.31890	0.65044	0.48856
306.88	2	6.01	165400	4.01	1.200158	0.79359	0.20641	0.48809	0.34477
153.44	1.86	6.98	181200	5.12	1.245776	0.82375	0.17625	0.43431	0.16340
76.72	2.03	7.1	196900	5.07	1.287323	0.85122	0.14878	0.38087	0.17157
38.36	2.11	7.81	211300	5.7	1.322614	0.87456	0.12544	0.33186	0.06863
Control	2.1167	8.33333	307400.00	6.21667	1.509972	1	0	0	0
1227.52	2.8767	4.51667	56466.67	1.64000	0.661471	0.43809	0.56107	0.85819	0.73619
613.76	2.3600	5.71000	113333.33	3.35000	1.009617	0.66878	0.33039	0.66370	0.46113
306.88	2.0400	6.32667	162533.33	4.28667	1.191217	0.78887	0.21101	0.49544	0.31046
153.44	1.9000	6.64333	185966.67	4.74333	1.258676	0.83361	0.16641	0.41530	0.23700
76.72	2.0367	6.97333	202500.00	4.93667	1.300921	0.86166	0.13821	0.35876	0.20590
38.36	2.1300	7.81333	240466.67	5.68333	1.384981	0.91736	0.08131	0.22891	0.08579

實驗毒物： DMNtP 初始細胞密度(cells/mL)： 15000

MCV (μm3)： 40.25 D (μm)： 4.311 Initial pH： 7.14 EDTA(%)： 0

T(°C)： 24 Test duration： 48-h

Conc	Initial DO	Final DO	Final cells	Delta DO		IR		IR	IR
mg/L	mg/L	mg/L	cells/ml	mg/L	μspecific	μrelative (growth rate)	(Biomass)	(DO)	
Control	2.03	5.19	177200	3.16	1.234614	1	0	0	0
472.66	2.6	3.11	22700	0.51	0.207157	0.16779	0.83221	0.95253	0.83861
189.05	1.89	3.12	36100	1.23	0.439121	0.35567	0.64433	0.86991	0.61076
75.625	1.43	3.1	45000	1.67	0.549306	0.44492	0.55508	0.81504	0.47152
30.25	1.48	3.41	58600	1.93	0.681342	0.55187	0.44813	0.73120	0.38924
12.1	1.69	3.77	91200	2.08	0.902502	0.73100	0.26900	0.53021	0.34177
4.84	1.56	4.47	154400	2.91	1.165748	0.94422	0.05578	0.14057	0.07911
Control	1.77	5.11	164200	3.34	1.196517	1	0	0	0
472.66	1.54	3.32	21100	1.78	0.170611	0.14259	0.85741	0.95912	0.46707
189.05	1.84	3.03	38700	1.19	0.473895	0.39606	0.60394	0.84115	0.64371
75.625	1.44	3.04	45900	1.6	0.559207	0.46736	0.53264	0.79290	0.52096
30.25	1.55	3.47	61000	1.92	0.701412	0.58621	0.41379	0.69169	0.42515
12.1	1.49	4.08	69500	2.59	0.766638	0.64072	0.35928	0.63472	0.22455
4.84	1.58	4.63	177100	3.05	1.234332	1.03160	-0.03160	-0.08646	0.08683
Control	1.84	5.14	180200	3.3	1.243009	1	0	0	0
472.66	2.4	3.39	18300	0.99	0.099425	0.07999	0.92001	0.98002	0.70000
189.05	1.84	3.17	28700	1.33	0.324423	0.26100	0.73900	0.91707	0.59697
75.625	1.57	3.1	34300	1.53	0.413548	0.33270	0.66730	0.88317	0.53636
30.25	1.39	3.33	52100	1.94	0.622557	0.50085	0.49915	0.77542	0.41212
12.1	1.38	3.4	90700	2.02	0.899754	0.72385	0.27615	0.54177	0.38788
4.84	1.47	4.37	154600	2.9	1.166395	0.93836	0.06164	0.15496	0.12121
Control	1.8800	5.14667	173866.67	3.26667	1.224713	1	0	0	0
472.66	2.1800	3.27333	20700.00	1.09333	0.159065	0.13012	0.86855	0.96412	0.66531
189.05	1.8567	3.10667	34500.00	1.25000	0.412480	0.33758	0.66007	0.87726	0.61735
75.625	1.4800	3.08000	41733.33	1.60000	0.507354	0.41499	0.58239	0.83172	0.51020
30.25	1.4733	3.40333	57233.33	1.93000	0.668437	0.54631	0.45349	0.73416	0.40918
12.1	1.5200	3.75000	83800.00	2.23000	0.856298	0.69853	0.29787	0.56693	0.31735
4.84	1.5367	4.49000	162033.33	2.95333	1.188825	0.97140	0.02877	0.07449	0.09592

實驗毒物：3-ethoxyacrylonitrile 初始細胞密度(cells/mL)： 15000

MCV (μm³)： 42.89 D (μm)： 4.343 Initial pH： 7.42 EDTA(%)： 0

T(°C)： 24 Test duration： 48-h

Conc	Initial DO	Final DO	Final cells	Delta DO		IR		IR	IR
mg/L	mg/L	mg/L	cells/ml	mg/L	μspecific	μrelative (growth rate)	(Biomass)	(DO)	
Control	1.12	6.54	201100	5.42	1.297876	1	0	0	0
707.13	2.01	2.86	43300	0.85	0.530051	0.40840	0.59160	0.84793	0.84317
235.71	1.45	2.85	65000	1.4	0.733169	0.56490	0.43510	0.73133	0.74170
78.57	1.01	2.87	133100	1.86	1.091525	0.84101	0.15899	0.36539	0.65683
26.19	0.95	3.23	159000	2.28	1.180427	0.90951	0.09049	0.22622	0.57934
8.73	1.39	4.38	163500	2.99	1.194381	0.92026	0.07974	0.20204	0.44834
2.91	1.31	5.68	181200	4.37	1.245776	0.95986	0.04014	0.10693	0.19373
Control	0.73	6.29	218800	5.56	1.340054	1	0	0	0
707.13	1.89	2.71	51000	0.82	0.611888	0.45661	0.54339	0.82336	0.85252
235.71	1.38	2.75	79100	1.37	0.831331	0.62037	0.37963	0.68548	0.75360
78.57	1.02	2.74	128400	1.72	1.073550	0.80112	0.19888	0.44357	0.69065
26.19	0.85	3.29	162100	2.44	1.190082	0.88808	0.11192	0.27821	0.56115
8.73	1.11	4.16	181200	3.05	1.245776	0.92965	0.07035	0.18449	0.45144
2.91	1.01	5.14	204200	4.13	1.305525	0.97423	0.02577	0.07164	0.25719
Control	0.88	6.18	259800	5.3	1.425931	1	0	0	0
707.13	1.85	2.65	42900	0.8	0.525411	0.36847	0.63153	0.88603	0.84906
235.71	1.21	2.71	69200	1.5	0.764475	0.53612	0.46388	0.77859	0.71698
78.57	1.09	3.04	136200	1.95	1.103037	0.77356	0.22644	0.50490	0.63208
26.19	1.07	3.2	148700	2.13	1.146940	0.80434	0.19566	0.45384	0.59811
8.73	1	3.61	186300	2.61	1.259654	0.88339	0.11661	0.30025	0.50755
2.91	1.54	5.69	237800	4.15	1.381690	0.96897	0.03103	0.08987	0.21698
Control	0.9100	6.33667	226566.67	5.42667	1.354620	1	0	0	0
707.13	1.9167	2.74000	45733.33	0.82333	0.555783	0.41116	0.58940	0.85473	0.84828
235.71	1.3467	2.77000	71100.00	1.42333	0.776325	0.57380	0.42687	0.73484	0.73771
78.57	1.0400	2.88333	132566.67	1.84333	1.089371	0.80523	0.19741	0.44430	0.66032
26.19	0.9567	3.24000	156600.00	2.28333	1.172483	0.86731	0.13604	0.33071	0.57924
8.73	1.1667	4.05000	177000.00	2.88333	1.233270	0.91110	0.09094	0.23428	0.46867
2.91	1.2867	5.50333	207733.33	4.21667	1.310997	0.96769	0.03196	0.08902	0.22297

實驗毒物：3-Dimethylamindacrylonitrile 初始細胞密度(cells/mL)：15000

MCV (μm³)：41.85 D (μm)：4.28 Initial pH：7.51 EDTA(%)：0
T(°C)：24 Test duration：48-h

Conc	Initial DO	Final DO	Final cells	Delta DO		IR			
mg/L	mg/L	mg/L	cells/ml	mg/L	μspecific	μrelative (growth rate)	(Biomass)	(DO)	
Control	1.63	7.71	324000	6.08	1.536347	1	0	0	0
61.37	1.92	3.46	38900	1.54	0.476472	0.31013	0.68987	0.92265	0.74671
30.69	1.5	3.71	68600	2.21	0.760121	0.49476	0.50524	0.82654	0.63651
15.34	1.47	3.92	85600	2.45	0.870818	0.56681	0.43319	0.77152	0.59704
7.67	1.46	4.92	98000	3.46	0.938459	0.61084	0.38916	0.73139	0.43092
3.83	1.67	5.89	183300	4.22	1.251537	0.81462	0.18538	0.45534	0.30592
1.92	1.67	6.65	269500	4.98	1.444259	0.94006	0.05994	0.17638	0.18092
Control	1.41	7.28	330500	5.87	1.546278	1	0	0	0
61.37	1.76	4.05	32200	2.29	0.381958	0.24702	0.75298	0.94548	0.60988
30.69	1.55	3.24	62600	1.69	0.714358	0.46199	0.53801	0.84913	0.71210
15.34	1.5	3.76	81200	2.26	0.844433	0.54611	0.45389	0.79017	0.61499
7.67	1.57	4.97	103400	3.4	0.965277	0.62426	0.37574	0.71981	0.42078
3.83	1.44	5.63	171300	4.19	1.217683	0.78749	0.21251	0.50460	0.28620
1.92	1.4	6.01	213100	4.61	1.326856	0.85810	0.14190	0.37211	0.21465
Control	1.54	7.18	322500	5.64	1.534026	1	0	0	0
61.37	1.68	3.37	33500	1.69	0.401748	0.26189	0.73811	0.93984	0.70035
30.69	1.49	3.6	66000	2.11	0.740802	0.48291	0.51709	0.83415	0.62589
15.34	1.38	3.59	80400	2.21	0.839482	0.54724	0.45276	0.78732	0.60816
7.67	1.53	5.01	97600	3.48	0.936414	0.61043	0.38957	0.73138	0.38298
3.83	1.38	5.65	183000	4.27	1.250718	0.81532	0.18468	0.45366	0.24291
1.92	1.47	6.47	243300	5	1.393123	0.90815	0.09185	0.25756	0.11348
Control	1.5267	7.39000	325666.67	5.86333	1.538884	1	0	0	0
61.37	1.7867	3.62667	34866.67	1.84000	0.420059	0.27301	0.72595	0.93605	0.68619
30.69	1.5133	3.51667	65733.33	2.00333	0.738427	0.47989	0.51993	0.83670	0.65833
15.34	1.4500	3.75667	82400.00	2.30667	0.851577	0.55339	0.44651	0.78305	0.60659
7.67	1.5200	4.96667	99666.67	3.44667	0.946717	0.61517	0.38470	0.72747	0.41217
3.83	1.4967	5.72333	179200.00	4.22667	1.239979	0.80581	0.19409	0.47146	0.27914
1.92	1.5133	6.37667	241966.67	4.86333	1.388079	0.90210	0.09652	0.26942	0.17055

實驗毒物： 甲醛 初始細胞密度(cells/mL)： 15000

MCV (μm³)： 40.29 D (μm)： 4.145 Initial pH： 7.59 EDTA(%)： 0

T(°C)： 24 Test duration： 48-h

Conc	Initial DO	Final DO	Final cells	Delta DO			IR	IR	IR
mg/L	mg/L	mg/L	cells/ml	mg/L	μspecific	μrelative (growth rate)	(Biomass)	(DO)	
Control	0.99	6.07	366100	5.08	1.597428	1	0	0	0
5.77	0.91	0.22	38900	-0.69	0.476472	0.29827	0.70173	0.93193	1.13583
2.89	0.91	0.17	52700	-0.74	0.628283	0.39331	0.60669	0.89262	1.14567
2.41	0.83	1.81	112100	0.98	1.005671	0.62956	0.37044	0.72344	0.80709
1.92	0.89	2.94	189400	2.05	1.267905	0.79372	0.20628	0.50328	0.59646
0.96	1.02	3.98	267400	2.96	1.440348	0.90167	0.09833	0.28112	0.41732
0.48	0.63	5.84	351600	5.21	1.577222	0.98735	0.01265	0.04130	-0.02559
Control	0.81	6.7	392100	5.89	1.631733	1	0	0	0
5.77	0.83	0.17	27700	-0.66	0.306691	0.18795	0.81205	0.96632	1.11205
2.89	0.87	0.16	70900	-0.71	0.776610	0.47594	0.52406	0.85176	1.12054
2.41	0.96	1.68	143000	0.72	1.127397	0.69092	0.30908	0.66057	0.87776
1.92	0.86	2.68	187200	1.82	1.262064	0.77345	0.22655	0.54336	0.69100
0.96	0.93	4.76	297100	3.83	1.493009	0.91498	0.08502	0.25192	0.34975
0.48	0.82	5.85	327200	5.03	1.541261	0.94455	0.05545	0.17210	0.14601
Control	0.84	6.63	347100	5.79	1.570781	1	0	0	0
5.77	0.91	0.14	40100	-0.77	0.491663	0.31301	0.68699	0.92442	1.13299
2.89	0.93	0.29	58800	-0.64	0.683046	0.43484	0.56516	0.86811	1.11054
2.41	0.84	1.89	122700	1.05	1.050846	0.66900	0.33100	0.67570	0.81865
1.92	0.82	2.56	162800	1.74	1.192236	0.75901	0.24099	0.55495	0.69948
0.96	0.9	4.12	289900	3.22	1.480743	0.94268	0.05732	0.17224	0.44387
0.48	0.81	5.55	334200	4.74	1.551845	0.98794	0.01206	0.03884	0.18135
Control	0.8800	6.46667	368433.33	5.58667	1.599981	1	0	0	0
5.77	0.8833	0.17667	35566.67	-0.70667	0.424942	0.26641	0.73030	0.94181	1.12649
2.89	0.9033	0.20667	60800.00	-0.69667	0.695980	0.43470	0.56281	0.87041	1.12470
2.41	0.8767	1.79333	125933.33	0.91667	1.061305	0.66316	0.33534	0.68613	0.83592
1.92	0.8567	2.72667	179800.00	1.87000	1.240735	0.77539	0.22411	0.53372	0.66527
0.96	0.9500	4.28667	284800.00	3.33667	1.471367	0.91978	0.08043	0.23663	0.40274
0.48	0.7533	5.74667	337666.67	4.99333	1.556776	0.97328	0.02724	0.08705	0.10621

實驗毒物： 戊二醛 初始細胞密度 (cells/mL): 15000
 MCV (μm³): 44.07 D (μm): 4.383 Initial pH: 7.59 EDTA(%): 0
 T(°C): Test duration: 48-h

Conc	Initial DO	Final DO	Final cells	Delta DO		IR		IR	IR
mg/L	mg/L	mg/L	cells/ml	mg/L	μspecific	μrelative (growth rate)	(Biomass)	(DO)	
Control	0.63	8.78	319400	8.15	1.52920	1	0	0	0
38.68	0.93	1.35	44200	0.42	0.54034	0.35335	0.64665	0.90407	0.94847
19.34	0.72	1.6	49000	0.88	0.59189	0.38706	0.61294	0.88830	0.89202
9.67	0.59	2.71	74500	2.12	0.80137	0.52405	0.47595	0.80453	0.73988
4.84	0.72	4.27	131100	3.55	1.08396	0.70884	0.29116	0.61859	0.56442
2.42	0.73	5.83	209500	5.1	1.31834	0.86211	0.13789	0.36104	0.37423
1.21	0.63	7	314200	6.37	1.52099	0.99463	0.00537	0.01708	0.21840
Control	0.53	8.82	329400	8.29	1.54461	1	0	0	0
38.68	0.99	1.53	32600	0.54	0.38813	0.25128	0.74872	0.94402	0.93486
19.34	0.76	1.86	45100	1.1	0.55042	0.35635	0.64365	0.90426	0.86731
9.67	0.65	2.02	66900	1.37	0.74757	0.48399	0.51601	0.83492	0.83474
4.84	0.64	4.16	99100	3.52	0.94404	0.61118	0.38882	0.73251	0.57539
2.42	0.72	5.99	198300	5.27	1.29087	0.83572	0.16428	0.41698	0.36429
1.21	0.82	6.92	288600	6.1	1.47850	0.95720	0.04280	0.12977	0.26417
Control	0.58	8.8	324400	8.22	1.53690	1	0	0	0
38.68	0.96	1.44	38400	0.48	0.46423	0.30231	0.69420	0.92437	0.94161
19.34	0.74	1.73	47050	0.99	0.57115	0.37170	0.62811	0.89641	0.87956
9.67	0.62	2.365	70700	1.745	0.77447	0.50402	0.49563	0.81997	0.78771
4.84	0.68	4.215	115100	3.535	1.01400	0.66001	0.33709	0.67647	0.56995
2.42	0.725	5.91	203900	5.185	1.30460	0.84892	0.15106	0.38946	0.36922
1.21	0.725	6.96	301400	6.235	1.49974	0.97591	0.02392	0.07434	0.24148

實驗毒物：3-hydrobenzaldehyde 初始細胞密度 (cells/mL): 15000
 MCV (μm3) : 44.07 D (μm) : 4.383 Initial pH : 7.59 EDTA(%) : 0
 T(°C) : Test duration : 48-h

Conc	Initial DO	Final DO	Final cells	Delta DO		IR		IR	IR
mg/L	mg/L	mg/L	cells/ml	mg/L	μspecific	μrelative (growth rate)	(Biomass)	(DO)	
Control	0.63	8.27	427100	7.64	1.67448	1	0	0	0
11.9	0.93	1.64	40800	0.71	0.50032	0.29879	0.70121	0.93739	0.90707
9.96	0.72	1.97	45800	1.25	0.55812	0.33331	0.66669	0.92526	0.83639
7.96	0.59	2.03	48900	1.44	0.59086	0.35286	0.64714	0.91774	0.81152
5.97	0.72	3.81	73200	3.09	0.79257	0.47332	0.52668	0.85877	0.59555
3.98	0.73	6.52	247100	5.79	1.40087	0.83660	0.16340	0.43679	0.24215
0.995	0.63	7.83	362200	7.2	1.59207	0.95078	0.04922	0.15749	0.05759
Control	0.53	7.53	419500	7	1.66551	1	0	0	0
11.9	0.99	1.54	39700	0.55	0.48665	0.29219	0.70781	0.93894	0.92143
9.96	0.76	1.82	42700	1.06	0.52307	0.31406	0.68594	0.93152	0.84857
7.96	0.65	2.2	51200	1.55	0.61384	0.36856	0.63144	0.91051	0.77857
5.97	0.64	3.78	67500	3.14	0.75204	0.45154	0.54846	0.87021	0.55143
3.98	0.72	6.42	275200	5.7	1.45472	0.87344	0.12656	0.35674	0.18571
0.995	0.82	7.32	391300	6.5	1.63071	0.97911	0.02089	0.06972	0.07143
Control	0.58	7.9	423300	7.32	1.67000	1	0	0	0
11.9	0.96	1.59	40250	0.63	0.49348	0.29549	0.70448	0.93816	0.91393
9.96	0.74	1.895	44250	1.155	0.54060	0.32369	0.67611	0.92836	0.84221
7.96	0.62	2.115	50050	1.495	0.60235	0.36071	0.63923	0.91416	0.79577
5.97	0.68	3.795	70350	3.115	0.77231	0.46243	0.53730	0.86444	0.57445
3.98	0.725	6.47	261150	5.745	1.42780	0.85502	0.14461	0.39713	0.21516
0.995	0.725	7.575	376750	6.85	1.61139	0.96495	0.03488	0.11401	0.06421

3-羟基苯甲醛+2-氯丙烯腈											
TU			DO(i)	DO(f)	Δ DO	Final			IR		
DO	Bio	Gro	mg/L	mg/L	mg/L	cell	μ_{specific}	μ_{relative}	DO	Bio	Gro
Control	Control	Control	0.93	10.21	9.28	374200	1.60837	1	0	0	0
2.756	3.842	2.153	1.37	3.14	1.77	31400	0.369379	0.22966	0.809267	0.916088	0.77034
2.284	3.185	1.785	1.39	3.24	1.85	54000	0.640467	0.398209	0.800647	0.855692	0.601791
1.499	2.091	1.172	1.35	5.7	4.35	89400	0.892535	0.554932	0.53125	0.76109	0.445068
1.044	1.455	0.815	1.11	8.31	7.2	155300	1.168654	0.726608	0.224138	0.584981	0.273392
0.680	0.949	0.532	1.04	8.76	7.72	299300	1.496698	0.930568	0.168103	0.20016	0.069432
0.331	0.462	0.259	1.44	10.14	8.7	350500	1.575655	0.97966	0.0625	0.063335	0.02034
Control	Control	Control	0.75	8.68	7.93	365200	1.596197	1	0	0	0
2.756	3.842	2.153	1.58	3.15	1.57	35700	0.43355	0.271614	0.802018	0.902245	0.728386
2.284	3.185	1.785	1.21	3.46	2.25	53800	0.638612	0.400083	0.716267	0.852683	0.599917
1.499	2.091	1.172	1.24	4.89	3.65	84800	0.866123	0.542616	0.539723	0.767798	0.457384
1.044	1.455	0.815	1.04	7.88	6.84	182100	1.248253	0.782017	0.137453	0.501369	0.217983
0.680	0.949	0.532	1.16	8.16	7	249400	1.405504	0.880533	0.117276	0.317087	0.119467
0.331	0.462	0.259	1	8.46	7.46	344400	1.566877	0.981631	0.059269	0.056955	0.018369
Control	Control	Control	0.92	10.18	9.26	384300	1.621687	1	0	0	0
2.756	3.842	2.153	1.71	2.97	1.26	48100	0.582616	0.359265	0.863931	0.874837	0.640735
2.284	3.185	1.785	1.26	4.15	2.89	63900	0.724635	0.44684	0.687905	0.833724	0.55316
1.499	2.091	1.172	1.34	4.61	3.27	88200	0.885778	0.546208	0.646868	0.770492	0.453792
1.044	1.455	0.815	1.16	7.75	6.59	169000	1.210924	0.746707	0.288337	0.560239	0.253293
0.680	0.949	0.532	1.47	8.21	6.74	237900	1.3819	0.852138	0.272138	0.380952	0.147862
0.331	0.462	0.259	1.03	9.82	8.79	304000	1.504489	0.927731	0.050756	0.208951	0.072269
Control	Control	Control	0.866667	9.69	8.823333	374566.7	1.608751	1	0	0	0
2.7559	3.8419	2.1528	1.553333	3.086667	1.533333	38400	0.461848	0.286847	0.826218	0.897482	0.707865
2.2842	3.1853	1.7854	1.286667	3.616667	2.33	57233.33	0.667904	0.415044	0.735927	0.847201	0.58384
1.4993	2.0911	1.1723	1.31	5.066667	3.756667	87466.67	1.061273	0.547919	0.574235	0.766486	0.452032
1.0440	1.4553	0.8154	1.103333	7.98	6.876667	168800	1.209277	0.751777	0.220627	0.549346	0.247708
0.6804	0.9488	0.5318	1.223333	8.376667	7.153333	262200	1.428034	0.887746	0.189271	0.299991	0.110843
0.3311	0.4616	0.2587	1.156667	9.473333	8.316667	332966.7	1.549007	0.963007	0.057423	0.111062	0.036587

3-甲基雙胺丙烯腈+戊醛											
TU			DO(i)	DO(f)	Δ DO	Final			IR		
DO	Bio	Gro	mg/L	mg/L	mg/L	cell	μ_{specific}	μ_{relative}	DO	Bio	Gro
Control	Control	Control	0.88	7.12	6.24	326400	1.540037	1	0	0	0
1.051	2.170	0.499	1.67	1.66	-0.01	36000	0.437734	0.284236	1.001603	0.889706	0.715764
0.659	1.362	0.313	1.3	2.03	0.73	53800	0.638612	0.414673	0.883013	0.835172	0.585327
0.410	0.846	0.194	1.3	3.41	2.11	99900	0.94806	0.615609	0.661859	0.693934	0.384391
0.270	0.558	0.128	1.55	5.59	4.04	164800	1.198341	0.778125	0.352564	0.495098	0.221875
0.161	0.331	0.076	1.77	6.38	4.61	200400	1.296133	0.841624	0.261218	0.386029	0.158376
0.551	0.687	0.186	1.78	7.09	5.31	258100	1.422648	0.923776	0.149038	0.209252	0.076224
Control	Control	Control	1.21	7.88	6.67	299200	1.496531	1	0	0	0
1.051	2.170	0.499	1.72	1.68	-0.04	38200	0.467393	0.312317	1.005997	0.872326	0.687683
0.659	1.362	0.313	1.3	2.22	0.92	49800	0.599982	0.400915	0.862069	0.833556	0.599085
0.410	0.846	0.194	1.36	4.05	2.69	102900	0.962854	0.64339	0.596702	0.656083	0.35661
0.270	0.558	0.128	1.29	5.68	4.39	195800	1.284522	0.858333	0.341829	0.345588	0.141667
0.161	0.331	0.076	1.63	7.01	5.38	211400	1.322851	0.883945	0.193403	0.293449	0.116055
0.551	0.687	0.186	2.07	7.44	5.37	244200	1.394969	0.932135	0.194903	0.183824	0.067865
Control	Control	Control	1.38	7.68	6.3	301200	1.499862	1	0	0	0
1.051	2.170	0.499	1.45	1.88	0.43	40100	0.491663	0.327806	0.931746	0.866866	0.672194
0.659	1.362	0.313	1.51	3.15	1.64	57700	0.673603	0.44911	0.739683	0.808433	0.55089
0.410	0.846	0.194	1.75	4.32	2.57	111200	1.00164	0.667821	0.592063	0.63081	0.332179
0.270	0.558	0.128	1.51	6.11	4.6	200100	1.295384	0.863668	0.269841	0.335657	0.136332
0.161	0.331	0.076	1.82	7.01	5.19	233200	1.371923	0.914699	0.17619	0.225764	0.085301
0.551	0.687	0.186	2.34	7.59	5.25	252400	1.411482	0.941075	0.166667	0.162019	0.058925
Control	Control	Control	1.156667	7.56	6.403333	308933.3	1.512143	1	0	0	0
1.0508	2.1702	0.4986	1.613333	1.74	0.126667	38100	0.465597	0.30812	0.980219	0.876672	0.691854
0.6588	1.3618	0.3128	1.37	2.466667	1.096667	53766.67	0.637399	0.421566	0.828735	0.82596	0.577993
0.4097	0.8462	0.1944	1.47	3.926667	2.456667	104666.7	1.09085	0.642273	0.616346	0.6612	0.357791
0.2701	0.5585	0.1283	1.45	5.793333	4.343333	186900	1.259415	0.833375	0.321707	0.395015	0.166129
0.1606	0.3306	0.0760	1.74	6.8	5.06	215000	1.330302	0.88009	0.209787	0.304057	0.119828
0.5511	0.6869	0.1860	2.063333	7.373333	5.31	251566.7	1.4097	0.932328	0.170744	0.185693	0.067905

丙烯腈+甲醛											
TU			DO(i)	DO(f)	Δ DO	Final					
DO	Bio	Gro	mg/L	mg/L	mg/L	cell	μ _{specific}	μ _{relative}	IR		
									DO	Bio	Gro
Control	Control	Control	0.79	7.68	6.89	281300	1.465685757	1	0	0	0
3.001	3.706	1.078	2	2.21	0.21	20900	0.165849479	0.113154868	0.969521045	0.925702097	0.886845132
1.500	1.853	0.539	1.41	4.84	3.43	166300	1.202871593	0.8206886	0.502177068	0.40881621	0.1793114
1.001	1.236	0.360	1.12	5.11	3.99	194300	1.280676578	0.873772957	0.420899855	0.309278351	0.126227043
0.500	0.617	0.180	1.05	7.04	5.99	254400	1.415428815	0.965710971	0.130624093	0.095627444	0.034289029
0.251	0.310	0.090	1.06	7.14	6.08	267000	1.439599229	0.982201827	0.117561684	0.050835407	0.017798173
0.128	0.157	0.046	1.11	7.36	6.25	269700	1.444630015	0.985634204	0.092888244	0.041237113	0.014365796
Control	Control	Control	1.24	7.63	6.39	276300	1.456718515	1	0	0	0
3.001	3.706	1.078	2.2	2.58	0.38	28200	0.315635888	0.216675964	0.940532081	0.897937025	0.783324036
1.500	1.853	0.539	1.31	5.12	3.81	172400	1.220883579	0.838105348	0.403755869	0.376040536	0.161894652
1.001	1.236	0.360	1.08	5.7	4.62	228800	1.362399029	0.935252085	0.276995305	0.171914586	0.064747915
0.500	0.617	0.180	1.27	6.68	5.41	244800	1.396195675	0.958452618	0.153364632	0.114006515	0.041547382
0.251	0.310	0.090	0.9	6.96	6.06	254400	1.415428815	0.971655677	0.051643192	0.079261672	0.028344323
0.128	0.157	0.046	0.93	7.15	6.22	265600	1.436970608	0.986443567	0.026604069	0.038726022	0.013556433
Control	Control	Control	0.78	7.68	6.9	285600	1.473271015	1	0	0	0
3.001	3.706	1.078	2.13	2.19	0.06	15500	0.016394911	0.011128239	0.991304348	0.945728291	0.988871761
1.500	1.853	0.539	1.43	5.11	3.68	195300	1.283243318	0.87101647	0.466666667	0.316176471	0.12898353
1.001	1.236	0.360	1.11	5.37	4.26	221200	1.345508534	0.913279716	0.382608696	0.225490196	0.086720284
0.500	0.617	0.180	1.17	6.94	5.77	258800	1.424002681	0.96655854	0.163768116	0.093837535	0.03344146
0.251	0.310	0.090	1.11	7.14	6.03	266000	1.437723054	0.975871404	0.126086957	0.068627451	0.024128596
0.128	0.157	0.046	0.91	7.42	6.51	267700	1.440908375	0.978033478	0.056521739	0.06267507	0.021966522
Control	Control	Control	0.94	7.66	6.73	281066.7	1.465225096	1	0	0	0
3.001	3.706	1.078	2.11	2.33	0.22	21533.3	0.165960093	0.113653024	0.967789891	0.923387097	0.876626249
1.500	1.853	0.539	1.38	5.02	3.64	178000.0	1.235666163	0.843270139	0.458870168	0.366698292	0.155878465
1.001	1.236	0.360	1.10	5.39	4.29	214766.7	1.347204642	0.907434919	0.362239841	0.235887097	0.091805458
0.500	0.617	0.180	1.16	6.89	5.72	252666.7	1.411875724	0.963574043	0.149157582	0.101043643	0.036348499
0.251	0.310	0.090	1.02	7.08	6.06	262466.7	1.430917033	0.976576303	0.099603568	0.066176471	0.02336353
0.128	0.157	0.046	0.98	7.31	6.33	267666.7	1.440836332	0.983370416	0.059464817	0.047675522	0.01666909

3-乙氧基丙烯腈+戊二醛											
TU			DO(i)	DO(f)	ΔDO	Final			IR		
DO	Bio	Gro	mg/L	mg/L	mg/L	cell	μ _{specific}	μ _{relative}	DO	Bio	Gro
Control	Control	Control	0.99	8.6	7.61	335100	1.553189397	1	0	0	0
1.502	1.165	0.268	1.54	1.97	0.43	24000	0.235001815	0.151302742	0.943495401	0.928379588	0.848697258
1.001	0.775	0.178	1.15	2.63	1.48	39100	0.479036133	0.308420939	0.805519054	0.883318412	0.691579061
0.500	0.387	0.089	1.16	4.31	3.15	122100	1.04839509	0.674995008	0.586070959	0.635631155	0.325004992
0.250	0.194	0.045	1.05	5.38	4.33	258800	1.424002681	0.916824879	0.431011827	0.227693226	0.083175121
0.124	0.096	0.022	1.07	6.67	5.6	291500	1.483494902	0.955128142	0.26412615	0.130110415	0.044871858
0.062	0.048	0.011	1.18	7.73	6.55	307000	1.509398773	0.971805999	0.139290407	0.083855566	0.028194001
Control	Control	Control	0.89	8.52	7.63	328800	1.543699731	1	0	0	0
1.502	1.165	0.268	1.72	2.21	0.49	23500	0.22447511	0.145413713	0.935779817	0.928527981	0.854586287
1.001	0.775	0.178	1.66	2.6	0.94	37700	0.460804947	0.298506852	0.876802097	0.885340633	0.701493148
0.500	0.387	0.089	1.09	4.14	3.05	119200	1.036376277	0.671358721	0.600262123	0.637469586	0.328641279
0.250	0.194	0.045	0.96	5.18	4.22	270600	1.446295757	0.936902254	0.446920052	0.177007299	0.063097746
0.124	0.096	0.022	1.09	6.57	5.48	296700	1.492335663	0.966726646	0.281782438	0.097627737	0.033273354
0.062	0.048	0.011	1.04	7.74	6.7	317100	1.52558349	0.988264401	0.121887287	0.035583942	0.011735599
Control	Control	Control	0.82	8.54	7.72	338500	1.558236946	1	0	0	0
1.502	1.165	0.268	1.59	1.85	0.26	16200	0.038480521	0.02469491	0.966321244	0.952141802	0.97530509
1.001	0.775	0.178	1.18	2.09	0.91	30500	0.354838241	0.227717769	0.882124352	0.909896603	0.772282231
0.500	0.387	0.089	1.03	4.26	3.23	118900	1.035116301	0.664286843	0.581606218	0.648744461	0.335713157
0.250	0.194	0.045	1.07	6.56	5.49	266600	1.438849603	0.923383063	0.288860104	0.212407681	0.076616937
0.124	0.096	0.022	1.13	7.02	5.89	298200	1.494857101	0.959325926	0.237046632	0.119054653	0.040674074
0.062	0.048	0.011	1.11	7.81	6.7	311100	1.516032101	0.972915002	0.132124352	0.080945347	0.027084998
Control	Control	Control	0.9	8.553333333	7.653333333	334133.3333	1.551708691	1	0	0	0
1.502	1.165	0.268	1.616666667	2.01	0.393333333	21233.33333	0.165985815	0.107137122	0.948606272	0.936452514	0.888022168
1.001	0.775	0.178	1.33	2.44	1.11	35766.66667	0.431559774	0.278215187	0.854965157	0.892956903	0.72000355
0.500	0.387	0.089	1.093333333	4.236666667	3.143333333	120066.6667	1.191949018	0.670213524	0.589285714	0.64066241	0.329787755
0.250	0.194	0.045	1.026666667	5.706666667	4.68	265333.3333	1.43638268	0.925703399	0.388501742	0.205905826	0.074288373
0.124	0.096	0.022	1.096666667	6.753333333	5.656666667	295466.6667	1.490229222	0.960393571	0.260888502	0.115722267	0.039627674
0.062	0.048	0.011	1.11	7.76	6.65	311733.3333	1.517004788	0.977661801	0.131097561	0.067039106	0.022359342

戊二醛+甲氧基丙烯腈											
TU			DO(i)	DO(f)	ΔDO	Final			IR		
DO	Bio	Gro	mg/L	mg/L	mg/L	cell	μ _{specific}	μ _{relative}	DO	Bio	Gro
Control	Control	Control	0.87	7.89	7.02	270500	1.446111	1	0	0	0
0.782	1.500	0.187	1.04	1.81	0.77	38400	0.470004	0.325012	0.890313	0.858041	0.674988
0.522	1.000	0.125	1.03	2.33	1.3	52200	0.623516	0.431168	0.814815	0.807024	0.568832
0.390	0.749	0.093	0.94	3.05	2.11	84900	0.866712	0.59934	0.69943	0.686137	0.40066
0.261	0.500	0.062	0.92	4.76	3.84	145900	1.137436	0.786548	0.452991	0.460628	0.213452
0.129	0.249	0.031	1.07	6.56	5.49	173900	1.225215	0.847248	0.217949	0.357116	0.152752
0.065	0.125	0.016	1.04	7.15	6.11	205700	1.309184	0.905314	0.12963	0.239556	0.094686
Control	Control	Control	0.79	8.14	7.35	291200	1.48298	1	0	0	0
0.782	1.500	0.187	1.04	1.59	0.55	37700	0.460805	0.310729	0.92517	0.870536	0.689271
0.522	1.000	0.125	0.89	2.13	1.24	55600	0.655067	0.441723	0.831293	0.809066	0.558277
0.390	0.749	0.093	1.1	3.08	1.98	71300	0.779423	0.525579	0.730612	0.755151	0.474421
0.261	0.500	0.062	1.02	4.14	3.12	118700	1.034275	0.69743	0.57551	0.592376	0.30257
0.129	0.249	0.031	0.92	6.44	5.52	174000	1.225503	0.826378	0.24898	0.402473	0.173622
0.065	0.125	0.016	0.96	7.16	6.2	210400	1.32048	0.890423	0.156463	0.277473	0.109577
Control	Control	Control	0.82	7.99	7.17	308100	1.511187	1	0	0	0
0.782	1.500	0.187	1.16	1.71	0.55	36800	0.448724	0.296935	0.923291	0.880558	0.703065
0.522	1.000	0.125	0.92	2.23	1.31	50400	0.60597	0.40099	0.817294	0.836417	0.59901
0.390	0.749	0.093	0.94	2.9	1.96	68400	0.758661	0.50203	0.726639	0.777994	0.49797
0.261	0.500	0.062	0.94	4.48	3.54	126000	1.064116	0.704159	0.506276	0.591042	0.295841
0.129	0.249	0.031	0.91	6.2	5.29	179600	1.241341	0.821434	0.262204	0.417072	0.178566
0.065	0.125	0.016	0.91	6.72	5.81	225100	1.354247	0.896148	0.189679	0.269393	0.103852
Control	Control	Control	0.827	8.007	7.180	289933.3	1.480093	1	0	0	0
0.782	1.500	0.187	1.080	1.703	0.623	37633.33	0.459844	0.310892	0.913185	0.8702	0.689411
0.522	1.000	0.125	0.947	2.230	1.283	52733.33	0.628184	0.424627	0.821263	0.818119	0.575501
0.390	0.749	0.093	0.993	3.010	2.017	74866.67	0.950292	0.542316	0.719127	0.74178	0.457166
0.261	0.500	0.062	0.960	4.460	3.500	130200	1.078609	0.729379	0.512535	0.550931	0.27032
0.129	0.249	0.031	0.967	6.400	5.433	175833.3	1.230686	0.831687	0.243268	0.393539	0.168866
0.065	0.125	0.016	0.970	7.010	6.040	213733.3	1.327971	0.897295	0.158774	0.262819	0.102958

戊二醛+甲基丙烯腈											
TU			DO(i)	DO(f)	Δ DO	Final	IR				
DO	Bio	Gro	mg/L	mg/L	mg/L	cell	μ _{specific}	μ _{relative}	DO	Bio	Gro
Control	Control	Control	1.72	9.84	8.12	348000	1.572076139	1	0	0	0
1.320	2.000	0.475	1.63	1.91	0.28	19400	0.128611432	0.081809926	0.965517241	0.944252874	0.918190074
0.990	1.500	0.356	1.65	2.22	0.57	39700	0.486650493	0.309559112	0.929802956	0.88591954	0.690440888
0.660	1.000	0.237	1.67	3.06	1.39	89800	0.894767387	0.569162883	0.828817734	0.741954023	0.430837117
0.327	0.497	0.118	1.63	5.12	3.49	116000	1.022769995	0.650585534	0.570197044	0.666666667	0.349414466
0.164	0.249	0.059	1.83	9.06	7.23	207000	1.312334296	0.834777822	0.109605911	0.405172414	0.165222178
0.083	0.126	0.030	1.92	9.75	7.83	285600	1.473271015	0.937149911	0.035714286	0.179310345	0.062850089
Control	Control	Control	1.84	9.37	7.53	321200	1.53200689	1	0	0	0
1.320	2.000	0.475	1.68	1.84	0.16	16100	0.035384535	0.023096851	0.97875166	0.949875467	0.976903149
0.990	1.500	0.356	1.85	2.26	0.41	35300	0.427916381	0.279317531	0.945551129	0.890099626	0.720682469
0.660	1.000	0.237	1.68	2.61	0.93	92100	0.907412371	0.592303061	0.876494024	0.713262765	0.407696939
0.327	0.497	0.118	1.61	5.05	3.44	124400	1.05772599	0.690418559	0.543160691	0.612702366	0.309581441
0.164	0.249	0.059	1.64	8.9	7.26	259800	1.425930952	0.930760142	0.035856574	0.191158157	0.069239858
0.083	0.126	0.030	1.64	9.01	7.37	276600	1.457261109	0.951210545	0.02124834	0.138854296	0.048789455
Control	Control	Control	1.77	10.11	8.34	352100	1.577932513	1	0	0	0
1.320	2.000	0.475	1.65	1.7	0.05	18800	0.112903334	0.071551434	0.994004796	0.946606078	0.928448566
0.990	1.500	0.356	1.9	2.13	0.23	40200	0.492908397	0.312376096	0.972422062	0.88582789	0.687623904
0.660	1.000	0.237	1.67	2.64	0.97	88800	0.889168224	0.563502062	0.883693046	0.747798921	0.436497938
0.327	0.497	0.118	1.63	5.08	3.45	109700	0.994849583	0.630476636	0.586330935	0.688440784	0.369523364
0.164	0.249	0.059	1.53	8.55	7.02	267100	1.43978646	0.912451228	0.158273381	0.241408691	0.087548772
0.083	0.126	0.030	1.81	9.95	8.14	311100	1.516032101	0.960771192	0.023980815	0.116444192	0.039228808
Control	Control	Control	1.78	9.77	8.00	340433.3	1.560671847	1	0	0	0
1.320	2.000	0.475	1.65	1.82	0.16	18100.0	0.092299767	0.058819404	0.979574823	0.946832468	0.939829737
0.990	1.500	0.356	1.80	2.20	0.40	38400.0	0.469158424	0.300417579	0.949562318	0.887202585	0.698924938
0.660	1.000	0.237	1.67	2.77	1.10	90233.3	1.069955521	0.574989335	0.862859525	0.734945657	0.425287792
0.327	0.497	0.118	1.62	5.08	3.46	116700.0	1.025115189	0.657160243	0.567319717	0.657201606	0.342906722
0.164	0.249	0.059	1.67	8.84	7.17	244633.3	1.392683902	0.892663064	0.103376407	0.281406051	0.105842705
0.083	0.126	0.030	1.79	9.57	7.78	291100.0	1.482188075	0.94971055	0.027094623	0.144913346	0.050142212

甲醛+3-甲氧基丙烯腈											
TU			DO(i)	DO(f)	Δ DO	Final			IR		
DO	Bio	Gro	mg/L	mg/L	mg/L	cell	μ_{specific}	μ_{relative}	DO	Bio	Gro
Control	Control	Control	1.36	7.01	5.65	289200	1.479534	1	0	0	0
2.768	6.607	1.501	2.21	1.32	-0.89	36400	0.443259	0.299594	1.157522	0.874136	0.700406
1.843	4.402	1.000	1.35	2.64	1.29	73400	0.793937	0.536613	0.771681	0.746196	0.463387
1.381	3.299	0.749	1.12	3.72	2.6	102100	0.958951	0.648144	0.539823	0.646957	0.351856
0.922	2.200	0.500	1.13	3.96	2.83	143400	1.128794	0.762939	0.499115	0.504149	0.237061
0.461	1.100	0.250	1.05	4.82	3.77	201000	1.297627	0.877051	0.332743	0.304979	0.122949
0.230	0.549	0.125	1.08	5.96	4.88	222500	1.348438	0.911394	0.136283	0.230636	0.088606
Control	Control	Control	1.12	7.59	6.47	340100	1.560595	1	0	0	0
2.768	6.607	1.501	2.58	1.32	-1.26	44400	0.542595	0.347685	1.194745	0.86945	0.652315
1.843	4.402	1.000	1.46	2.05	0.59	101200	0.954524	0.611641	0.90881	0.70244	0.388359
1.381	3.299	0.749	1.11	3.25	2.14	102400	0.960418	0.615418	0.669243	0.698912	0.384582
0.922	2.200	0.500	1.19	4.19	3	194600	1.281448	0.821128	0.536321	0.427815	0.178872
0.461	1.100	0.250	1.11	4.77	3.66	251100	1.408901	0.902797	0.434312	0.261688	0.097203
0.230	0.549	0.125	1.04	6.42	5.38	279200	1.461939	0.936783	0.16847	0.179065	0.063217
Control	Control	Control	1.24	7.88	6.64	297900	1.494354	1	0	0	0
2.768	6.607	1.501	1.95	1.4	-0.55	38800	0.475185	0.317987	1.082831	0.869755	0.682013
1.843	4.402	1.000	1.27	1.97	0.7	75800	0.810024	0.542056	0.894578	0.745552	0.457944
1.381	3.299	0.749	1.13	3.5	2.37	79400	0.833224	0.557582	0.643072	0.733468	0.442418
0.922	2.200	0.500	1.08	4.42	3.34	168000	1.207957	0.808347	0.496988	0.436052	0.191653
0.461	1.100	0.250	0.99	4.7	3.71	210000	1.319529	0.88301	0.441265	0.295065	0.11699
0.230	0.549	0.125	1.04	6	4.96	209300	1.317859	0.881892	0.253012	0.297415	0.118108
Control	Control	Control	1.24	7.493333	6.253333	309066.7	1.511494	1	0	0	0
2.7681	6.6071	1.5011	2.246667	1.346667	-0.9	39866.67	0.487013	0.321755	1.143923	0.871009	0.676917
1.8431	4.4017	0.9999	1.36	2.22	0.86	83466.67	0.852828	0.563437	0.862473	0.72994	0.432691
1.3806	3.2990	0.7493	1.12	3.49	2.37	94633.33	1.067025	0.607048	0.621002	0.693809	0.39119
0.9221	2.2003	0.5000	1.133333	4.19	3.056667	168666.7	1.206066	0.797471	0.511194	0.454271	0.200176
0.4610	1.1002	0.2500	1.05	4.763333	3.713333	220700	1.342019	0.887619	0.406183	0.285915	0.111305
0.2298	0.5488	0.1247	1.053333	6.126667	5.073333	237000	1.376079	0.910023	0.188699	0.233175	0.087753

甲醛+乙氧基丙烯腈											
TU			DO(i)	DO(f)	Δ DO	Final					
DO	Bio	Gro	mg/L	mg/L	mg/L	cell	μ specific	μ relative	DO	Bio	Gro
Control	Control	Control	0.83	6.89	6.06	248900	1.404501	1	0	0	0
17.764	9.790	1.501	1.53	1.93	0.4	30900	0.361353	0.257282	0.933993	0.875854	0.742718
11.841	6.525	1.000	1.23	2.01	0.78	38800	0.475185	0.33833	0.871287	0.844114	0.66167
8.879	4.892	0.749	1.16	3.54	2.38	79900	0.836363	0.595488	0.607261	0.678988	0.404512
5.917	3.259	0.499	1.08	4.28	3.2	147300	1.142211	0.81325	0.471947	0.408196	0.18675
2.962	1.633	0.251	1.07	5.82	4.75	178900	1.239388	0.882441	0.216172	0.281237	0.117559
1.477	0.813	0.124	0.95	6.82	5.87	201000	1.297627	0.923907	0.031353	0.192447	0.076093
Control	Control	Control	0.87	6.82	5.95	217000	1.335924	1	0	0	0
17.764	9.790	1.501	1.65	1.86	0.21	26500	0.284547	0.212997	0.964706	0.87788	0.787003
11.841	6.525	1.000	1.31	1.98	0.67	46900	0.569984	0.426659	0.887395	0.783871	0.573341
8.879	4.892	0.749	1.14	3.05	1.91	99800	0.947559	0.709291	0.678992	0.540092	0.290709
5.917	3.259	0.499	1.02	4.53	3.51	117700	1.030044	0.771035	0.410084	0.457604	0.228965
2.962	1.633	0.251	1.02	5.86	4.84	158300	1.178221	0.881952	0.186555	0.270507	0.118048
1.477	0.813	0.124	0.98	6.86	5.88	180100	1.242731	0.930241	0.011765	0.170046	0.069759
Control	Control	Control	0.9	7.21	6.31	223600	1.350904	1	0	0	0
17.764	9.790	1.501	1.66	2	0.34	21400	0.17767	0.13152	0.946117	0.904293	0.86848
11.841	6.525	1.000	1.27	2.14	0.87	35500	0.430741	0.318854	0.862124	0.841234	0.681146
8.879	4.892	0.749	1.13	3.78	2.65	94100	0.918154	0.679659	0.580032	0.579159	0.320341
5.917	3.259	0.499	1.08	4.85	3.77	155100	1.16801	0.864613	0.402536	0.306351	0.135387
2.962	1.633	0.251	0.99	6.05	5.06	159400	1.181683	0.874735	0.198098	0.28712	0.125265
1.477	0.813	0.124	0.95	6.99	6.04	200400	1.296133	0.959456	0.042789	0.103757	0.040544
Control	Control	Control	0.866667	6.973333	6.106667	229833.3	1.363776	1	0	0	0
17.7644	9.7903	1.5011	1.613333	1.93	0.316667	26266.67	0.274524	0.200599	0.948144	0.885714	0.794728
11.8407	6.5247	1.0000	1.27	2.043333	0.773333	40400	0.49197	0.361281	0.873362	0.82422	0.636985
8.8789	4.8918	0.7495	1.143333	3.456667	2.313333	91266.67	0.977579	0.661479	0.621179	0.602901	0.33839
5.9171	3.2590	0.4989	1.06	4.553333	3.493333	140033.3	1.113422	0.8163	0.427948	0.390718	0.181539
2.9618	1.6328	0.2505	1.026667	5.91	4.883333	165533.3	1.199764	0.879709	0.200328	0.279768	0.120244
1.4774	0.8130	0.1242	0.96	6.89	5.93	193833.3	1.27883	0.937868	0.02893	0.156635	0.062417

甲醛+二甲基二胺丙烯腈											
TU			DO(i)	DO(f)	Δ DO	Final			IR		
DO	Bio	Gro	mg/L	mg/L	mg/L	cell	μ _{specific}	μ _{relative}	DO	Bio	Gro
Control	Control	Control	1.14	7	5.86	224000	1.351798	1	0	0	0
3.484	5.943	1.499	1.32	0.42	-0.9	15300	0.009901	0.007325	1.153584	0.931696	0.992675
2.325	3.965	1.000	1.09	1.46	0.37	76800	0.816577	0.604068	0.93686	0.657143	0.395932
1.742	2.973	0.750	1.02	3.46	2.44	100100	0.94906	0.702072	0.583618	0.553125	0.297928
1.152	1.971	0.497	1.05	4.63	3.58	184200	1.253986	0.927643	0.389078	0.177679	0.072357
0.576	0.986	0.248	1.07	5.94	4.87	192400	1.275763	0.943753	0.168942	0.141071	0.056247
0.288	0.493	0.124	1.06	6.87	5.81	201200	1.298125	0.960295	0.008532	0.101786	0.039705
Control	Control	Control	1.17	8.66	7.49	205000	1.30748	1	0	0	0
3.484	5.943	1.499	1.79	1.25	-0.54	26700	0.288307	0.220506	1.072096	0.869756	0.779494
2.325	3.965	1.000	1.31	0.97	-0.34	63000	0.717542	0.548798	1.045394	0.692683	0.451202
1.742	2.973	0.750	0.99	3.85	2.86	128900	1.075493	0.82257	0.618158	0.37122	0.17743
1.152	1.971	0.497	1.03	4.81	3.78	181300	1.246051	0.953018	0.495327	0.11561	0.046982
0.576	0.986	0.248	1.04	6.42	5.38	185200	1.256693	0.961157	0.281709	0.096585	0.038843
0.288	0.493	0.124	1.13	8.11	6.98	212000	1.324268	1.01284	0.068091	-0.03415	-0.01284
Control	Control	Control	1.53	7.32	5.79	244700	1.395991	1	0	0	0
3.484	5.943	1.499	1.55	0.33	-1.22	50800	0.609923	0.43691	1.210708	0.792399	0.56309
2.325	3.965	1.000	1.46	1.11	-0.35	83200	0.856599	0.613613	1.060449	0.659992	0.386387
1.742	2.973	0.750	1.5	4	2.5	152000	1.157915	0.829457	0.568221	0.378831	0.170543
1.152	1.971	0.497	1.5	4.93	3.43	164000	1.195908	0.856673	0.407599	0.329792	0.143327
0.576	0.986	0.248	1.08	5.21	4.13	201000	1.297627	0.929538	0.286701	0.178586	0.070462
0.288	0.493	0.124	1.25	6.66	5.41	233800	1.373208	0.983679	0.06563	0.044544	0.016321
Control	Control	Control	1.28	7.66	6.38	224566.67	1.35	1.00	0	0	0
3.4840	5.9431	1.4987	1.55	0.67	-0.89	30933.33	0.30	0.22	1.138976	0.862253	0.732538
2.3251	3.9651	1.0000	1.29	1.18	-0.11	74333.33	0.80	0.59	1.016719	0.668992	0.40856
1.7424	2.9727	0.7496	1.17	3.77	2.60	127000.00	1.12	0.78	0.592476	0.434466	0.210628
1.1523	1.9713	0.4966	1.19	4.79	3.60	176500.00	1.23	0.91	0.436259	0.214042	0.089003
0.5762	0.9857	0.2483	1.06	5.86	4.79	192866.67	1.28	0.94	0.248694	0.141161	0.056233
0.2881	0.4928	0.1241	1.15	7.21	6.07	215666.67	1.33	0.99	0.049112	0.039632	0.014943

甲醛+甲基丙烯腈											
TU			DO(i)	DO(f)	Δ DO	Final			IR		
DO	Bio	Gro	mg/L	mg/L	mg/L	cell	μ_{specific}	μ_{relative}	DO	Bio	Gro
Control	Control	Control	0.96	7.04	6.08	249300	1.405303	1	0	0	0
3.860	6.369	1.501	2.38	1.48	-0.9	19600	0.13374	0.095168	1.148026	0.92138	0.904832
2.571	4.244	1.000	1.49	1.62	0.13	28100	0.31386	0.223339	0.978618	0.887284	0.776661
1.927	3.181	0.749	1.01	3.23	2.22	88900	0.889731	0.633124	0.634868	0.643402	0.366876
1.282	2.119	0.499	1.26	4.91	3.65	129200	1.076656	0.766138	0.399671	0.481749	0.233862
0.644	1.063	0.251	0.91	5.52	4.61	170900	1.216514	0.865659	0.241776	0.314481	0.134341
0.319	0.528	0.124	1.1	7.11	6.01	214100	1.329196	0.945843	0.011513	0.141195	0.054157
Control	Control	Control	0.78	7.04	6.26	206600	1.311367	1	0	0	0
3.860	6.369	1.501	2.1	1.5	-0.6	13200	-0.06392	-0.04874	1.095847	0.936108	1.04874
2.571	4.244	1.000	1.3	1.67	0.37	48800	0.58984	0.44979	0.940895	0.763795	0.55021
1.927	3.181	0.749	0.95	4.21	3.26	102400	0.960418	0.732379	0.479233	0.504356	0.267621
1.282	2.119	0.499	1.08	5.14	4.06	133500	1.093026	0.833501	0.351438	0.353824	0.166499
0.644	1.063	0.251	1.02	6.02	5	163000	1.19285	0.909623	0.201278	0.211036	0.090377
0.319	0.528	0.124	1.25	6.87	5.62	206800	1.311851	1.000369	0.102236	-0.00097	-0.00037
Control	Control	Control	0.89	7.66	6.77	213800	1.328495	1	0	0	0
3.860	6.369	1.501	2.54	1.19	-1.35	20000	0.143841	0.108274	1.199409	0.906455	0.891726
2.571	4.244	1.000	1.24	1.82	0.58	37900	0.46345	0.348854	0.914328	0.822732	0.651146
1.927	3.181	0.749	0.98	3.95	2.97	79400	0.833224	0.627194	0.5613	0.628625	0.372806
1.282	2.119	0.499	0.96	4.82	3.86	121800	1.047165	0.788234	0.429838	0.430309	0.211766
0.644	1.063	0.251	0.94	5.93	4.99	198400	1.291117	0.971864	0.262925	0.07203	0.028136
0.319	0.528	0.124	1.08	7.14	6.06	223500	1.350681	1.016699	0.104874	-0.04537	-0.0167
Control	Control	Control	0.876667	7.246667	6.37	223233.3	1.348389	1	0	0	0
3.8601	6.3694	1.5011	2.34	1.39	-0.95	17600	0.071221	0.051567	1.149137	0.921159	0.9408
2.5712	4.2441	1.0000	1.343333	1.703333	0.36	38266.67	0.455717	0.340661	0.943485	0.82858	0.653159
1.9268	3.1814	0.7495	0.98	3.796667	2.816667	90233.33	0.971935	0.664232	0.557823	0.595789	0.335468
1.2823	2.1187	0.4989	1.1	4.956667	3.856667	128166.7	1.072282	0.795957	0.394558	0.425862	0.205501
0.6444	1.0627	0.2505	0.956667	5.823333	4.866667	177433.3	1.233494	0.915716	0.236002	0.205166	0.08504
0.3189	0.5280	0.1242	1.143333	7.04	5.896667	214800	1.330576	0.987637	0.074307	0.037778	0.014262

ISOBOLOGRAM-甲氧基丙烯腈：戊醛=1：3											
TU			DO(i)	DO(f)	Δ DO	Final			IR		
DO	Bio	Gro	mg/L	mg/L	mg/L	cell	μ _{specific}	μ _{relative}	DO	Bio	Gro
Control	Control	Control	1.56	7	5.44	240200	1.386711	1	0	0	0
1.093	1.499	0.390	1.43	1.77	0.34	33100	0.395742	0.285381	0.9375	0.862198	0.714619
0.730	1.000	0.260	1.61	2.29	0.68	59400	0.688122	0.496226	0.875	0.752706	0.503774
0.547	0.744	0.194	1.62	3.97	2.35	79200	0.831963	0.599954	0.568015	0.670275	0.400046
0.364	0.499	0.130	1.55	4.7	3.15	133000	1.091149	0.786862	0.420956	0.446295	0.213138
0.182	0.249	0.065	1.81	5.46	3.65	163200	1.193463	0.860643	0.329044	0.320566	0.139357
0.092	0.125	0.033	1.42	6.17	4.75	188900	1.266584	0.913373	0.126838	0.213572	0.086627
Control	Control	Control	1.6	6.92	5.32	256800	1.420124	1	0	0	0
1.093	1.499	0.390	1.37	1.67	0.3	47200	0.573172	0.403607	0.943609	0.816199	0.596393
0.730	1.000	0.260	1.48	2.15	0.67	66600	0.745327	0.524833	0.87406	0.740654	0.475167
0.547	0.744	0.194	1.54	3.67	2.13	97400	0.935388	0.658667	0.599624	0.620717	0.341333
0.364	0.499	0.130	1.55	4.56	3.01	158000	1.177272	0.828993	0.434211	0.384735	0.171007
0.182	0.249	0.065	1.53	5.05	3.52	190100	1.26975	0.894112	0.338346	0.259735	0.105888
0.092	0.125	0.033	1.3	6.08	4.78	201000	1.297627	0.913742	0.101504	0.21729	0.086258
Control	Control	Control	1.64	7.11	5.47	248500	1.403696	1	0	0	0
1.093	1.499	0.390	1.44	1.79	0.35	38900	0.476472	0.339441	0.936015	0.843461	0.660559
0.730	1.000	0.260	1.41	2.2	0.79	66100	0.741559	0.52829	0.855576	0.734004	0.47171
0.547	0.744	0.194	1.47	3.63	2.16	100200	0.949559	0.67647	0.605119	0.596781	0.32353
0.364	0.499	0.130	1.43	4.41	2.98	149500	1.149623	0.818997	0.45521	0.39839	0.181003
0.182	0.249	0.065	1.53	5.36	3.83	188900	1.266584	0.90232	0.299817	0.239839	0.09768
0.092	0.125	0.033	1.31	6.5	5.19	221000	1.345056	0.958225	0.051188	0.110664	0.041775
Control	Control	Control	1.6	7.01	5.41	248500	1.40351	1	0	0	0
1.093	1.499	0.390	1.413333	1.743333	0.33	39733.33	0.481795	0.34281	0.939002	0.840107	0.653009
0.730	1.000	0.260	1.5	2.213333	0.713333	64033.33	0.725003	0.51645	0.868145	0.742321	0.483024
0.547	0.744	0.194	1.543333	3.756667	2.213333	92266.67	1.017091	0.64503	0.590881	0.628706	0.352911
0.364	0.499	0.130	1.51	4.556667	3.046667	146833.3	1.139348	0.811617	0.436845	0.409121	0.187414
0.182	0.249	0.065	1.623333	5.29	3.666667	180733.3	1.243266	0.885692	0.322243	0.272703	0.113422
0.092	0.125	0.033	1.343333	6.25	4.906667	203633.3	1.303089	0.928447	0.093038	0.18055	0.070928

ISOBOLOGRAM-甲氧基丙烯腈：戊醛=3：1											
TU			DO(i)	DO(f)	Δ DO	Final			IR		
DO	Bio	Gro	mg/L	mg/L	mg/L	cell	μ _{specific}	μ _{relative}	DO	Bio	Gro
Control	Control	Control	0.83	12.35	11.52	399100	1.640581	1	0	0	0
0.619	2.468	0.669	1.53	4.5	2.97	45800	0.558117	0.340195	0.742188	0.885242	0.659805
0.494	1.974	0.535	1.23	4.8	3.57	73400	0.793937	0.483936	0.690104	0.816086	0.516064
0.372	1.482	0.402	1.16	6.18	5.02	102100	0.958951	0.584519	0.564236	0.744174	0.415481
0.249	0.990	0.269	1.08	7.11	6.03	176600	1.232919	0.751513	0.476563	0.557504	0.248487
0.124	0.495	0.135	1.07	9.52	8.45	251300	1.409299	0.859024	0.266493	0.370333	0.140976
0.062	0.247	0.067	0.95	10.33	9.38	303800	1.50416	0.916846	0.185764	0.238787	0.083154
Control	Control	Control	0.87	11.74	10.87	392500	1.632243	1	0	0	0
0.619	2.468	0.669	1.65	4.63	2.98	44400	0.542595	0.332423	0.725851	0.886879	0.667577
0.494	1.974	0.535	1.31	4.93	3.62	80200	0.838237	0.513549	0.666973	0.795669	0.486451
0.372	1.482	0.402	1.14	6.37	5.23	102400	0.960418	0.588404	0.518859	0.739108	0.411596
0.249	0.990	0.269	1.02	7.55	6.53	194600	1.281448	0.785084	0.399264	0.504204	0.214916
0.124	0.495	0.135	1.02	9.26	8.24	251100	1.408901	0.863168	0.24195	0.360255	0.136832
0.062	0.247	0.067	0.98	10.22	9.24	301400	1.500194	0.9191	0.149954	0.232102	0.0809
Control	Control	Control	0.9	11.78	10.88	401000	1.642956	1	0	0	0
0.619	2.468	0.669	1.66	4.49	2.83	41500	0.508822	0.309699	0.73989	0.896509	0.690301
0.494	1.974	0.535	1.27	4.87	3.6	75800	0.810024	0.493029	0.669118	0.810973	0.506971
0.372	1.482	0.402	1.13	6.32	5.19	79400	0.833224	0.507149	0.522978	0.801995	0.492851
0.249	0.990	0.269	1.08	7.79	6.71	168000	1.207957	0.735234	0.383272	0.581047	0.264766
0.124	0.495	0.135	0.99	9.13	8.14	284900	1.472044	0.895973	0.251838	0.289526	0.104027
0.062	0.247	0.067	0.95	10.35	9.4	319200	1.528884	0.930569	0.136029	0.20399	0.069431
Control	Control	Control	0.866667	11.95667	11.09	397533.3	1.638593	1	0	0	0
0.6186	2.4684	0.6694	1.613333	4.54	2.926667	43900	0.536511	0.327439	0.736099	0.889569	0.672326
0.4941	1.9736	0.5349	1.27	4.866667	3.596667	76466.67	0.814066	0.496838	0.675684	0.807647	0.502993
0.3716	1.4816	0.4020	1.143333	6.29	5.146667	94633.33	1.067025	0.560024	0.535918	0.761949	0.437952
0.2490	0.9896	0.2690	1.06	7.483333	6.423333	179733.3	1.240774	0.757277	0.4208	0.547879	0.242218
0.1245	0.4948	0.1345	1.026667	9.303333	8.276667	262433.3	1.430081	0.872722	0.253682	0.339846	0.126717
0.0622	0.2474	0.0673	0.96	10.3	9.34	308133.3	1.511079	0.922172	0.1578	0.224887	0.077732

ISOBOLOGRAM-3-羟基苯甲醛：二氯丙烯腈=3：1											
TU			DO(i)	DO(f)	Δ DO	Final			IR		
DO	Bio	Gro	mg/L	mg/L	mg/L	cell	μ _{specific}	μ _{relative}	DO	Bio	Gro
Control	Control	Control	0.96	6.88	5.92	238300	1.38274	1	0	0	0
2.492	3.497	1.972	1.38	1.5	0.12	28100	0.31386	0.226984	0.97973	0.882081	0.773016
2.139	3.001	1.692	1.08	1.99	0.91	89300	0.891976	0.645078	0.846284	0.625262	0.354922
1.780	2.498	1.409	1.01	2.98	1.97	88900	0.889731	0.643455	0.66723	0.626941	0.356545
1.422	1.995	1.125	1.09	4.28	3.19	117500	1.029194	0.744315	0.461149	0.506924	0.255685
0.717	1.006	0.567	0.91	5.15	4.24	189200	1.267377	0.916569	0.283784	0.206043	0.083431
0.358	0.503	0.283	1.1	5.86	4.76	221400	1.34596	0.973401	0.195946	0.070919	0.026599
Control	Control	Control	0.78	7.27	6.49	251600	1.409895	1	0	0	0
2.492	3.497	1.972	1.44	1.84	0.4	39200	0.480313	0.340673	0.938367	0.844197	0.659327
2.139	3.001	1.692	0.98	2.08	1.1	100200	0.949559	0.673496	0.830508	0.601749	0.326504
1.780	2.498	1.409	0.95	2.68	1.73	102400	0.960418	0.681198	0.733436	0.593005	0.318802
1.422	1.995	1.125	0.85	4.99	4.14	145300	1.135375	0.805291	0.362096	0.422496	0.194709
0.717	1.006	0.567	1.02	6.02	5	163000	1.19285	0.846056	0.229584	0.352146	0.153944
0.358	0.503	0.283	0.79	6.87	6.08	221800	1.346863	0.955293	0.063174	0.118442	0.044707
Control	Control	Control	0.89	7.54	6.65	213800	1.328495	1	0	0	0
2.492	3.497	1.972	1.23	1.66	0.43	22100	0.193764	0.145852	0.935338	0.896632	0.854148
2.139	3.001	1.692	1	1.82	0.82	65400	0.736236	0.554188	0.876692	0.694107	0.445812
1.780	2.498	1.409	0.98	3.13	2.15	99900	0.94806	0.713634	0.676692	0.532741	0.286366
1.422	1.995	1.125	0.96	4.82	3.86	121800	1.047165	0.788234	0.419549	0.430309	0.211766
0.717	1.006	0.567	0.94	5.38	4.44	188900	1.266584	0.953397	0.332331	0.116464	0.046603
0.358	0.503	0.283	1.08	7.31	6.23	205000	1.30748	0.984181	0.063158	0.04116	0.015819
Control	Control	Control	0.876667	7.23	6.353333	234566.7	1.37371	1	0	0	0
2.4921	3.4972	1.9722	1.35	1.666667	0.316667	29800	0.329312	0.237836	0.950157	0.872957	0.750351
2.1385	3.0009	1.6922	1.02	1.963333	0.943333	84966.67	0.859257	0.624254	0.851522	0.637772	0.369307
1.7802	2.4982	1.4087	0.98	2.93	1.95	97066.67	1.010214	0.679429	0.693075	0.586187	0.320888
1.4219	1.9954	1.1253	0.966667	4.696667	3.73	128200	1.070578	0.77928	0.412907	0.45346	0.219715
0.7166	1.0055	0.5669	0.956667	5.516667	4.56	180366.7	1.24227	0.905341	0.282267	0.231064	0.095556
0.3583	0.5028	0.2835	0.99	6.68	5.69	216066.7	1.333434	0.970958	0.104407	0.078869	0.029877

ISOBOLOGRAM-3-羟基苯甲醛：二氯丙烯腈=3：1											
TU			DO(i)	DO(f)	ΔDO	Final			IR		
DO	Bio	Gro	mg/L	mg/L	mg/L	cell	μspecific	μrelative	DO	Bio	Gro
Control	Control	Control	0.97	6.34	5.37	247600	1.401882	1	0	0	0
1.816	2.516	1.401	1.22	1.08	-0.14	37200	0.454129	0.323943	1.026071	0.849758	0.676057
1.454	2.014	1.121	1.11	1.07	-0.04	45000	0.549306	0.391835	1.007449	0.818255	0.608165
1.065	1.475	0.822	1.07	1.58	0.51	72000	0.784308	0.559468	0.905028	0.709208	0.440532
0.710	0.984	0.548	0.93	2.75	1.82	123500	1.054095	0.751914	0.66108	0.501212	0.248086
0.355	0.492	0.274	0.94	3.87	2.93	183000	1.250718	0.892171	0.454376	0.260905	0.107829
0.178	0.246	0.137	1.05	4.86	3.81	231200	1.367616	0.975557	0.290503	0.066236	0.024443
Control	Control	Control	0.85	5.29	4.44	222900	1.349337	1	0	0	0
1.816	2.516	1.401	1.15	0.73	-0.42	39700	0.48665	0.360659	1.094595	0.821893	0.639341
1.454	2.014	1.121	1.16	1.03	-0.13	70100	0.770936	0.571345	1.029279	0.685509	0.428655
1.065	1.475	0.822	0.95	1.38	0.43	100400	0.950556	0.704462	0.903153	0.549574	0.295538
0.710	0.984	0.548	1.07	3.31	2.24	129300	1.077043	0.798202	0.495495	0.419919	0.201798
0.355	0.492	0.274	1.02	4.74	3.72	208900	1.316903	0.975963	0.162162	0.062808	0.024037
0.178	0.246	0.137	0.94	5.08	4.14	222600	1.348663	0.999501	0.067568	0.001346	0.000499
Control	Control	Control	0.89	5.98	5.09	242300	1.391063	1	0	0	0
1.816	2.516	1.401	1.09	1.01	-0.08	33300	0.398754	0.286654	1.015717	0.862567	0.713346
1.454	2.014	1.121	1.11	1.23	0.12	54200	0.642315	0.461744	0.976424	0.77631	0.538256
1.065	1.475	0.822	0.87	1.57	0.7	99400	0.945551	0.679733	0.862475	0.589765	0.320267
0.710	0.984	0.548	0.93	4.01	3.08	111800	1.004331	0.721988	0.394892	0.538589	0.278012
0.355	0.492	0.274	0.94	4.93	3.99	198400	1.291117	0.928152	0.21611	0.18118	0.071848
0.178	0.246	0.137	1.02	5.21	4.19	238900	1.383997	0.994921	0.176817	0.014032	0.005079
Control	Control	Control	0.903333	5.87	4.966667	237600	1.380761	1	0	0	0
1.8163	2.5156	1.4007	1.153333	0.94	-0.21333	36733.33	0.446511	0.323752	1.042953	0.845398	0.675793
1.4540	2.0138	1.1213	1.126667	1.11	-0.01667	56433.33	0.654186	0.474975	1.003356	0.762486	0.520365
1.0650	1.4752	0.8215	0.963333	1.51	0.546667	90600	1.015587	0.647887	0.889933	0.618687	0.349003
0.7103	0.9839	0.5480	0.976667	3.356667	2.38	121533.3	1.045156	0.757368	0.520805	0.488496	0.242675
0.3551	0.4918	0.2739	0.966667	4.513333	3.546667	196766.7	1.286246	0.932095	0.285906	0.171857	0.06826
0.1778	0.2463	0.1372	1.003333	5.05	4.046667	230900	1.366759	0.989993	0.185235	0.028199	0.010354

附錄二 戊二醛檢量線

戊二醛濃度檢量線

