

## 基于激波管装置的乙烯氧化实验研究与动力学机理分析

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## Ethylene Oxidation Experimental Study and Kinetic Mechanism Analysis Based on Shock Tube

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表 S1 96%氩气稀释度下乙烯着火延迟

Table S1 Ethylene ignition delay time (96%Ar)

Temperature /K	Pressure /atm	Ignition delay time/ $\mu$ s
1743	2.7	22.2
1667	1.9	53.6
1476	2.1	118.8
1396	2.0	224.5
1388	2.0	156.0
1378	1.9	321.5
1330	1.9	346.1
1304	1.7	785.0
1299	1.8	453.9
1272	1.6	583.9
1261	1.7	830.5
1257	2.0	916.0
1219	1.8	964.0
1216	1.7	1571.0
1192	1.5	2010.9
1177	1.4	2447.8
1173	1.4	2485.4
1124	1.3	3256.4

96%Ar,  $\Phi = 1$ ,  $C_2H_4 : O_2 = 1 : 3$

表 S2 75%氩气稀释度下乙烯着火延迟

Table S2 Ethylene ignition delay time (75%Ar)

Temperature /K	Pressure /atm	Ignition delay time / $\mu$ s
1372	3.0	40
1324	2.3	80
1281	2.3	120
1165	1.9	269
1161	1.8	377
1122	1.7	822
1094	1.6	1009
1092	2.0	1643

75%Ar,  $\Phi = 1$ ,  $C_2H_4 : O_2 = 1 : 3$