

	t0 (tau)	0
	tf (tau)	0.9
1	$[CH_3]CH_3OO+C_3H_8=>CH_3OOH+ipropyl-->[CH_3OOH]CH_3OOH=>CH_3O+OH-->[CH_3O]$	0.74586997
2	$[CH_3]CH_3OO+C_3H_8=>CH_3OOH+npropyl-->[CH_3OOH]CH_3OOH=>CH_3O+OH-->[CH_3O]$	0.24913231
3	$[CH_3]CH_3OO+C_3H_8=>CH_3OOH+ipropyl-->[CH_3OOH]CH_3OOH=>CH_3O+OH-->[CH_3O]$ $>[CH_3O]CH_3O+O_2=>CH_2O+HO_2-->[CH_2O]CH_3OO+CH_2O=>CH_3OOH+HCO-->[CH_3OOH]CH_3OOH=>CH_3O+OH-->[CH_3O]$	0.02172197
4	$[CH_3]CH_3OO+C_3H_8=>CH_3OOH+ipropyl-->[CH_3OOH]CH_3OOH=>CH_3O+OH-->[CH_3O]$ $CH_3O+O_2=>CH_2O+HO_2-->[CH_2O]CH_3CH_2OO+CH_2O=>CH_3CH_2OOH+HCO-->[CH_3CH_2OOH]CH_3CH_2OOH=>ethoxy+OH-->[ethoxy]$	0.02141752
7	$[CH_3]CH_3OO+C_3H_8=>CH_3OOH+ipropyl-->[CH_3OOH]CH_3OOH=>CH_3O+OH-->[CH_3O]$ $CH_3O+O_2=>CH_2O+HO_2-->[CH_2O]npropyloo+CH_2O=>npropylooh+HCO-->[npropylooh]npropylooh=>npropyloxy+OH-->[npropyloxy]$	0.01918675
5	$[CH_3]CH_3OO+C_3H_8=>CH_3OOH+ipropyl-->[CH_3OOH]CH_3OOH=>CH_3O+OH-->[CH_3O]$ $CH_3O+M=>CH_2O+H+M-->[CH_2O]CH_3OO+CH_2O=>CH_3OOH+HCO-->[CH_3OOH]CH_3OOH=>CH_3O+OH-->[CH_3O]$	0.01702931
8	$[CH_3]CH_3OO+C_3H_8=>CH_3OOH+ipropyl-->[CH_3OOH]CH_3OOH=>CH_3O+OH-->[CH_3O]$ $CH_3O+M=>CH_2O+H+M-->[CH_2O]CH_3CH_2OO+CH_2O=>CH_3CH_2OOH+HCO-->[CH_3CH_2OOH]CH_3CH_2OOH=>ethoxy+OH-->[ethoxy]$	0.01651177
6	$[CH_3]CH_3OO+C_3H_8=>CH_3OOH+ipropyl-->[CH_3OOH]CH_3OOH=>CH_3O+OH-->[CH_3O]$ $CH_3O+O_2=>CH_2O+HO_2-->[CH_2O]ipropyloo+CH_2O=>ipropylooh+HCO-->[ipropylooh]ipropylooh=>ipropyloxy+OH-->[ipropyloxy]$	0.01584396
10	$[CH_3]CH_3OO+C_3H_8=>CH_3OOH+ipropyl-->[CH_3OOH]CH_3OOH=>CH_3O+OH-->[CH_3O]$ $CH_3O+M=>CH_2O+H+M-->[CH_2O]npropyloo+CH_2O=>npropylooh+HCO-->[npropylooh]npropylooh=>npropyloxy+OH-->[npropyloxy]$	0.01505723

12	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + ipropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow$ $\rightarrow [CH_3O]CH_3O + O_2 \Rightarrow CH_2O + HO_2 \rightarrow$ $\rightarrow [CH_2O]CH_3CH_2OO + CH_2O \Rightarrow CH_3CH_2OOH + HCO \rightarrow$ $\rightarrow [CH_3CH_2OOH]CH_3CH_2OOH \Rightarrow ethoxy + OH \rightarrow [ethoxy]ethoxy \Rightarrow CH_3 + CH_2O \rightarrow$ $\rightarrow [CH_3]CH_3OO + HO_2 \Rightarrow CH_3OOH + O_2 \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow$ $\rightarrow [CH_3O]$	0.01250264
9	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + ipropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow$ $\rightarrow [CH_3O]CH_3O + M \Rightarrow CH_2O + H + M \rightarrow$ $\rightarrow [CH_2O]ipropylooh + CH_2O \Rightarrow ipropylooh + HCO \rightarrow$ $\rightarrow [ipropylooh]ipropylooh \Rightarrow ipropyloxy + OH \rightarrow [ipropyloxy]$	0.01227276
17	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + ipropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow$ $\rightarrow [CH_3O]CH_3O + M \Rightarrow CH_2O + H + M \rightarrow$ $\rightarrow [CH_2O]CH_3CH_2OO + CH_2O \Rightarrow CH_3CH_2OOH + HCO \rightarrow$ $\rightarrow [CH_3CH_2OOH]CH_3CH_2OOH \Rightarrow ethoxy + OH \rightarrow [ethoxy]ethoxy \Rightarrow CH_3 + CH_2O \rightarrow$ $\rightarrow [CH_3]CH_3OO + HO_2 \Rightarrow CH_3OOH + O_2 \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow$ $\rightarrow [CH_3O]$	0.00982116
21	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + ipropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow$ $\rightarrow [CH_3O]CH_3O + O_2 \Rightarrow CH_2O + HO_2 \rightarrow$ $\rightarrow [CH_2O]ipropylooh + CH_2O \Rightarrow ipropylooh + HCO \rightarrow$ $\rightarrow [ipropylooh]ipropylooh \Rightarrow ipropyloxy + OH \rightarrow$ $\rightarrow [ipropyloxy]ipropyloxy \Rightarrow CH_3 + acetaldehyde \rightarrow$ $\rightarrow [CH_3]CH_3OO + HO_2 \Rightarrow CH_3OOH + O_2 \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow$ $\rightarrow [CH_3O]$	0.00943482
22	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + ipropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow$ $\rightarrow [CH_3O]CH_3O + M \Rightarrow CH_2O + H + M \rightarrow$ $\rightarrow [CH_2O]ipropylooh + CH_2O \Rightarrow ipropylooh + HCO \rightarrow$ $\rightarrow [ipropylooh]ipropylooh \Rightarrow ipropyloxy + OH \rightarrow$ $\rightarrow [ipropyloxy]ipropyloxy \Rightarrow CH_3 + acetaldehyde \rightarrow$ $\rightarrow [CH_3]CH_3OO + HO_2 \Rightarrow CH_3OOH + O_2 \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow$ $\rightarrow [CH_3O]$	0.00733947
11	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + npropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow$ $\rightarrow [CH_3O]CH_3O + O_2 \Rightarrow CH_2O + HO_2 \rightarrow [CH_2O]CH_3OO + CH_2O \Rightarrow CH_3OOH + HCO \rightarrow$ $\rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow [CH_3O]$	0.00728259

13	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + npropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow [CH_3O]CH_3O + O_2 \Rightarrow CH_2O + HO_2 \rightarrow [CH_2O]CH_3CH_2OO + CH_2O \Rightarrow CH_3CH_2OOH + HCO \rightarrow [CH_3CH_2OOH]CH_3CH_2OOH \Rightarrow ethoxy + OH \rightarrow [ethoxy]$	0.00711955
16	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + npropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow [CH_3O]CH_3O + O_2 \Rightarrow CH_2O + HO_2 \rightarrow [CH_2O]npropylooh + CH_2O \Rightarrow npropylooh + HCO \rightarrow [npropylooh]npropylooh \Rightarrow npropyloxy + OH \rightarrow [npropyloxy]$	0.00641608
14	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + npropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow [CH_3O]CH_3O + M \Rightarrow CH_2O + H + M \rightarrow [CH_2O]CH_3OO + CH_2O \Rightarrow CH_3OOH + HCO \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow [CH_3O]$	0.00570917
18	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + npropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow [CH_3O]CH_3O + M \Rightarrow CH_2O + H + M \rightarrow [CH_2O]CH_3CH_2OO + CH_2O \Rightarrow CH_3CH_2OOH + HCO \rightarrow [CH_3CH_2OOH]CH_3CH_2OOH \Rightarrow ethoxy + OH \rightarrow [ethoxy]$	0.00554991
15	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + npropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow [CH_3O]CH_3O + O_2 \Rightarrow CH_2O + HO_2 \rightarrow [CH_2O]ipropylooh + CH_2O \Rightarrow ipropylooh + HCO \rightarrow [ipropylooh]ipropylooh \Rightarrow ipropyloxy + OH \rightarrow [ipropyloxy]$	0.00525387
20	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + npropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow [CH_3O]CH_3O + M \Rightarrow CH_2O + H + M \rightarrow [CH_2O]npropylooh + CH_2O \Rightarrow npropylooh + HCO \rightarrow [npropylooh]npropylooh \Rightarrow npropyloxy + OH \rightarrow [npropyloxy]$	0.00502749
27	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + ipropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow [CH_3O]CH_3O + O_2 \Rightarrow CH_2O + HO_2 \rightarrow [CH_2O]npropylooh + CH_2O \Rightarrow npropylooh + HCO \rightarrow [npropylooh]npropylooh \Rightarrow npropyloxy + OH \rightarrow [npropyloxy]npropyloxy \Rightarrow C_2H_5 + CH_2O \rightarrow [C_2H_5]CH_3CH_2OO + HO_2 \Rightarrow CH_3CH_2OOH + O_2 \rightarrow [CH_3CH_2OOH]CH_3CH_2OOH \Rightarrow ethoxy + OH \rightarrow [ethoxy]$	0.00428694
24	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + npropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow [CH_3O]CH_3O + O_2 \Rightarrow CH_2O + HO_2 \rightarrow [CH_2O]CH_3CH_2OO + CH_2O \Rightarrow CH_3CH_2OOH + HCO \rightarrow [CH_3CH_2OOH]CH_3CH_2OOH \Rightarrow ethoxy + OH \rightarrow [ethoxy]ethoxy \Rightarrow CH_3 + CH_2O \rightarrow [CH_3]CH_3OO + HO_2 \Rightarrow CH_3OOH + O_2 \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow [CH_3O]$	0.00416954

19	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + npropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow [CH_3O]CH_3O + M \Rightarrow CH_2O + H + M \rightarrow [CH_2O]ipropylooh + CH_2O \Rightarrow ipropylooh + HCO \rightarrow [ipropylooh]ipropylooh \Rightarrow ipropyloxy + OH \rightarrow [ipropyloxy]$	0.00409377
30	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + ipropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow [CH_3O]CH_3O + M \Rightarrow CH_2O + H + M \rightarrow [CH_2O]npropylooh + CH_2O \Rightarrow npropylooh + HCO \rightarrow [npropylooh]npropylooh \Rightarrow npropyloxy + OH \rightarrow [npropyloxy]npropyloxy \Rightarrow C_2H_5 + CH_2O \rightarrow [C_2H_5]CH_3CH_2OO + HO_2 \Rightarrow CH_3CH_2OOH + O_2 \rightarrow [CH_3CH_2OOH]CH_3CH_2OOH \Rightarrow ethoxy + OH \rightarrow [ethoxy]$	0.00341143
28	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + npropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow [CH_3O]CH_3O + M \Rightarrow CH_2O + H + M \rightarrow [CH_2O]CH_3CH_2OO + CH_2O \Rightarrow CH_3CH_2OOH + HCO \rightarrow [CH_3CH_2OOH]CH_3CH_2OOH \Rightarrow ethoxy + OH \rightarrow [ethoxy]ethoxy \Rightarrow CH_3 + CH_2O \rightarrow [CH_3]CH_3OO + HO_2 \Rightarrow CH_3OOH + O_2 \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow [CH_3O]$	0.00326229
31	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + npropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow [CH_3O]CH_3O + O_2 \Rightarrow CH_2O + HO_2 \rightarrow [CH_2O]ipropylooh + CH_2O \Rightarrow ipropylooh + HCO \rightarrow [ipropylooh]ipropylooh \Rightarrow ipropyloxy + OH \rightarrow [ipropyloxy]ipropyloxy \Rightarrow CH_3 + acetaldehyde \rightarrow [CH_3]CH_3OO + HO_2 \Rightarrow CH_3OOH + O_2 \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow [CH_3O]$	0.0031717
40	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + ipropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow [CH_3O]CH_3O + O_2 \Rightarrow CH_2O + HO_2 \rightarrow [CH_2O]npropylooh + CH_2O \Rightarrow npropylooh + HCO \rightarrow [npropylooh]npropylooh \Rightarrow npropyloxy + OH \rightarrow [npropyloxy]npropyloxy \Rightarrow C_2H_5 + CH_2O \rightarrow [C_2H_5]CH_3CH_2OO + HO_2 \Rightarrow CH_3CH_2OOH + O_2 \rightarrow [CH_3CH_2OOH]CH_3CH_2OOH \Rightarrow ethoxy + OH \rightarrow [ethoxy]ethoxy \Rightarrow CH_3 + CH_2O \rightarrow [CH_3]CH_3OO + HO_2 \Rightarrow CH_3OOH + O_2 \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow [CH_3O]$	0.00260987

34	<p> <math>[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + npropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow [CH_3O]CH_3O + M \Rightarrow CH_2O + H + M</math>  <math>&gt;[CH_2O]ipropylooh + CH_2O \Rightarrow ipropylooh + HCO</math>  <math>&gt;[ipropylooh]ipropylooh \Rightarrow ipropyloxy + OH</math>  <math>&gt;[ipropyloxy]ipropyloxy \Rightarrow CH_3 + acetaldehyde</math>  <math>&gt;[CH_3]CH_3OO + HO_2 \Rightarrow CH_3OOH + O_2 \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH</math>  <math>&gt;[CH_3O]</math> </p>	0.00245122
50	<p> <math>[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + ipropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH</math>  <math>&gt;[CH_3O]CH_3O + O_2 \Rightarrow CH_2O + HO_2</math>  <math>&gt;[CH_2O]npropylooh + CH_2O \Rightarrow npropylooh + HCO</math>  <math>&gt;[npropylooh]npropylooh \Rightarrow npropyloxy + OH</math>  <math>&gt;[npropyloxy]npropyloxy \Rightarrow C_2H_5 + CH_2O</math>  <math>&gt;[C_2H_5]CH_3CH_2OO + CH_2O \Rightarrow CH_3CH_2OOH + HCO</math>  <math>&gt;[CH_3CH_2OOH]CH_3CH_2OOH \Rightarrow ethoxy + OH \rightarrow [ethoxy]</math> </p>	0.00201357
48	<p> <math>[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + ipropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH</math>  <math>&gt;[CH_3O]CH_3O + M \Rightarrow CH_2O + H + M</math>  <math>&gt;[CH_2O]npropylooh + CH_2O \Rightarrow npropylooh + HCO</math>  <math>&gt;[npropylooh]npropylooh \Rightarrow npropyloxy + OH</math>  <math>&gt;[npropyloxy]npropyloxy \Rightarrow C_2H_5 + CH_2O</math>  <math>&gt;[C_2H_5]CH_3CH_2OO + HO_2 \Rightarrow CH_3CH_2OOH + O_2</math>  <math>&gt;[CH_3CH_2OOH]CH_3CH_2OOH \Rightarrow ethoxy + OH \rightarrow [ethoxy]ethoxy \Rightarrow CH_3 + CH_2O</math>  <math>\rightarrow [CH_3]CH_3OO + HO_2 \Rightarrow CH_3OOH + O_2 \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH</math>  <math>&gt;[CH_3O]</math> </p>	0.00200332
41	<p> <math>[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + ipropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH</math>  <math>&gt;[CH_3O]CH_3O + O_2 \Rightarrow CH_2O + HO_2</math>  <math>&gt;[CH_2O]ipropylooh + CH_2O \Rightarrow ipropylooh + HCO</math>  <math>&gt;[ipropylooh]ipropylooh \Rightarrow ipropyloxy + OH</math>  <math>&gt;[ipropyloxy]ipropyloxy \Rightarrow CH_3 + acetaldehyde</math>  <math>&gt;[acetaldehyde]acetaldehyde + HO_2 \Rightarrow acetyl + H_2O_2</math>  <math>&gt;[acetyl]acetyl(+M) \Rightarrow CH_3 + CO(+M) \rightarrow [CH_3]CH_3OO + HO_2 \Rightarrow CH_3OOH + O_2</math>  <math>&gt;[CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow [CH_3O]</math> </p>	0.00183062

51	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + ipropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow$ $[CH_3O]CH_3O + O_2 \Rightarrow CH_2O + HO_2 \rightarrow$ $[CH_2O]CH_3CH_2OO + CH_2O \Rightarrow CH_3CH_2OOH + HCO \rightarrow$ $[CH_3CH_2OOH]CH_3CH_2OOH \Rightarrow ethoxy + OH \rightarrow [ethoxy]ethoxy \Rightarrow CH_3 + CH_2O \rightarrow$ $[CH_3]CH_3OO + CH_2O \Rightarrow CH_3OOH + HCO \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow$ $[CH_3O]$	0.00174421
60	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + ipropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow$ $[CH_3O]CH_3O + M \Rightarrow CH_2O + H + M \rightarrow$ $[CH_2O]npropyloo + CH_2O \Rightarrow npropylooh + HCO \rightarrow$ $[npropylooh]npropylooh \Rightarrow npropyloxy + OH \rightarrow$ $[npropyloxy]npropyloxy \Rightarrow C_2H_5 + CH_2O \rightarrow$ $[C_2H_5]CH_3CH_2OO + CH_2O \Rightarrow CH_3CH_2OOH + HCO \rightarrow$ $[CH_3CH_2OOH]CH_3CH_2OOH \Rightarrow ethoxy + OH \rightarrow [ethoxy]$	0.00158828
43	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + npropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow$ $[CH_3O]CH_3O + O_2 \Rightarrow CH_2O + HO_2 \rightarrow$ $[CH_2O]npropyloo + CH_2O \Rightarrow npropylooh + HCO \rightarrow$ $[npropylooh]npropylooh \Rightarrow npropyloxy + OH \rightarrow$ $[npropyloxy]npropyloxy \Rightarrow C_2H_5 + CH_2O \rightarrow$ $[C_2H_5]CH_3CH_2OO + HO_2 \Rightarrow CH_3CH_2OOH + O_2 \rightarrow$ $[CH_3CH_2OOH]CH_3CH_2OOH \Rightarrow ethoxy + OH \rightarrow [ethoxy]$	0.00145561
65	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + ipropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow$ $[CH_3O]CH_3O + O_2 \Rightarrow CH_2O + HO_2 \rightarrow$ $[CH_2O]npropyloo + CH_2O \Rightarrow npropylooh + HCO \rightarrow$ $[npropylooh]npropylooh \Rightarrow npropyloxy + OH \rightarrow$ $[npropyloxy]npropyloxy \Rightarrow C_2H_5 + CH_2O \rightarrow$ $[C_2H_5]CH_3CH_2OO + C_3H_8 \Rightarrow CH_3CH_2OOH + ipropyl \rightarrow$ $[CH_3CH_2OOH]CH_3CH_2OOH \Rightarrow ethoxy + OH \rightarrow [ethoxy]$	0.00143175
49	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + ipropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow$ $[CH_3O]CH_3O + M \Rightarrow CH_2O + H + M \rightarrow$ $[CH_2O]ipropyloo + CH_2O \Rightarrow ipropylooh + HCO \rightarrow$ $[ipropylooh]ipropylooh \Rightarrow ipropyloxy + OH \rightarrow$ $[ipropyloxy]ipropyloxy \Rightarrow CH_3 + acetaldehyde \rightarrow$ $[acetaldehyde]acetaldehyde + HO_2 \Rightarrow acetyl + H_2O_2 \rightarrow$ $[acetyl]acetyl(+M) \Rightarrow CH_3 + CO(+M) \rightarrow [CH_3]CH_3OO + HO_2 \Rightarrow CH_3OOH + O_2 \rightarrow$ $[CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow [CH_3O]$	0.00142228

57	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + ipropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow$ $[CH_3O]CH_3O + M \Rightarrow CH_2O + H + M \rightarrow$ $[CH_2O]CH_3CH_2OO + CH_2O \Rightarrow CH_3CH_2OOH + HCO \rightarrow$ $[CH_3CH_2OOH]CH_3CH_2OOH \Rightarrow ethoxy + OH \rightarrow [ethoxy]ethoxy \Rightarrow CH_3 + CH_2O \rightarrow$ $[CH_3]CH_3OO + CH_2O \Rightarrow CH_3OOH + HCO \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow$ $[CH_3O]$	0.00137427
54	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + npropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow$ $[CH_3O]CH_3O + M \Rightarrow CH_2O + H + M \rightarrow$ $[CH_2O]npropyloo + CH_2O \Rightarrow npropylooh + HCO \rightarrow$ $[npropylooh]npropylooh \Rightarrow npropyloxy + OH \rightarrow$ $[npropyloxy]npropyloxy \Rightarrow C_2H_5 + CH_2O \rightarrow$ $[C_2H_5]CH_3CH_2OO + HO_2 \Rightarrow CH_3CH_2OOH + O_2 \rightarrow$ $[CH_3CH_2OOH]CH_3CH_2OOH \Rightarrow ethoxy + OH \rightarrow [ethoxy]$	0.00113754
98	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + ipropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow$ $[CH_3O]CH_3O + O_2 \Rightarrow CH_2O + HO_2 \rightarrow$ $[CH_2O]npropyloo + CH_2O \Rightarrow npropylooh + HCO \rightarrow$ $[npropylooh]npropylooh \Rightarrow npropyloxy + OH \rightarrow$ $[npropyloxy]npropyloxy \Rightarrow C_2H_5 + CH_2O \rightarrow$ $[C_2H_5]CH_3CH_2OO + CH_2O \Rightarrow CH_3CH_2OOH + HCO \rightarrow$ $[CH_3CH_2OOH]CH_3CH_2OOH \Rightarrow ethoxy + OH \rightarrow [ethoxy]ethoxy \Rightarrow CH_3 + CH_2O \rightarrow$ $[CH_3]CH_3OO + HO_2 \Rightarrow CH_3OOH + O_2 \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow$ $[CH_3O]$	0.00113719
76	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + ipropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow$ $[CH_3O]CH_3O + M \Rightarrow CH_2O + H + M \rightarrow$ $[CH_2O]npropyloo + CH_2O \Rightarrow npropylooh + HCO \rightarrow$ $[npropylooh]npropylooh \Rightarrow npropyloxy + OH \rightarrow$ $[npropyloxy]npropyloxy \Rightarrow C_2H_5 + CH_2O \rightarrow$ $[C_2H_5]CH_3CH_2OO + C_3H_8 \Rightarrow CH_3CH_2OOH + ipropyl \rightarrow$ $[CH_3CH_2OOH]CH_3CH_2OOH \Rightarrow ethoxy + OH \rightarrow [ethoxy]$	0.00112006
64	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + ipropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow$ $[CH_3O]CH_3O + O_2 \Rightarrow CH_2O + HO_2 \rightarrow$ $[CH_2O]ipropyloo + CH_2O \Rightarrow ipropylooh + HCO \rightarrow$ $[ipropylooh]ipropylooh \Rightarrow ipropyloxy + OH \rightarrow$ $[ipropyloxy]ipropyloxy \Rightarrow CH_3 + acetaldehyde \rightarrow$ $[CH_3]CH_3OO + CH_2O \Rightarrow CH_3OOH + HCO \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow$ $[CH_3O]$	0.00110462

69	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + ipropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow$ $\rightarrow [CH_3O]CH_3O + O_2 \Rightarrow CH_2O + HO_2 \rightarrow$ $\rightarrow [CH_2O]ipropylooh + CH_2O \Rightarrow ipropylooh + HCO \rightarrow$ $\rightarrow [ipropylooh]ipropylooh \Rightarrow ipropyloxy + OH \rightarrow$ $\rightarrow [ipropyloxy]ipropyloxy \Rightarrow CH_3 + acetaldehyde \rightarrow$ $\rightarrow [acetaldehyde]CH_3OO + acetaldehyde \Rightarrow CH_3OOH + acetyl \rightarrow$ $\rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow [CH_3O]$	0.00096097
72	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + ipropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow$ $\rightarrow [CH_3O]CH_3O + O_2 \Rightarrow CH_2O + HO_2 \rightarrow$ $\rightarrow [CH_2O]CH_3CH_2OO + CH_2O \Rightarrow CH_3CH_2OOH + HCO \rightarrow$ $\rightarrow [CH_3CH_2OOH]CH_3CH_2OOH \Rightarrow ethoxy + OH \rightarrow [ethoxy]ethoxy \Rightarrow CH_3 + CH_2O \rightarrow$ $\rightarrow [CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + ipropyl \rightarrow$ $\rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow [CH_3O]$	0.0009239
74	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + ipropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow$ $\rightarrow [CH_3O]CH_3O + M \Rightarrow CH_2O + H + M \rightarrow$ $\rightarrow [CH_2O]ipropylooh + CH_2O \Rightarrow ipropylooh + HCO \rightarrow$ $\rightarrow [ipropylooh]ipropylooh \Rightarrow ipropyloxy + OH \rightarrow$ $\rightarrow [ipropyloxy]ipropyloxy \Rightarrow CH_3 + acetaldehyde \rightarrow$ $\rightarrow [CH_3]CH_3OO + CH_2O \Rightarrow CH_3OOH + HCO \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow$ $\rightarrow [CH_3O]$	0.00086984
84	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + npropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow$ $\rightarrow [CH_3O]CH_3O + O_2 \Rightarrow CH_2O + HO_2 \rightarrow$ $\rightarrow [CH_2O]npropylooh + CH_2O \Rightarrow npropylooh + HCO \rightarrow$ $\rightarrow [npropylooh]npropylooh \Rightarrow npropyloxy + OH \rightarrow$ $\rightarrow [npropyloxy]npropyloxy \Rightarrow C_2H_5 + CH_2O \rightarrow$ $\rightarrow [C_2H_5]CH_3CH_2OO + HO_2 \Rightarrow CH_3CH_2OOH + O_2 \rightarrow$ $\rightarrow [CH_3CH_2OOH]CH_3CH_2OOH \Rightarrow ethoxy + OH \rightarrow [ethoxy]ethoxy \Rightarrow CH_3 + CH_2O \rightarrow$ $\rightarrow [CH_3]CH_3OO + HO_2 \Rightarrow CH_3OOH + O_2 \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow$ $\rightarrow [CH_3O]$	0.00085701
89	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + ipropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow$ $\rightarrow [CH_3O]CH_3O + O_2 \Rightarrow CH_2O + HO_2 \rightarrow$ $\rightarrow [CH_2O]ipropylooh + CH_2O \Rightarrow ipropylooh + HCO \rightarrow$ $\rightarrow [ipropylooh]ipropylooh \Rightarrow ipropyloxy + OH \rightarrow$ $\rightarrow [ipropyloxy]ipropyloxy \Rightarrow CH_3 + acetaldehyde \rightarrow$ $\rightarrow [CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + ipropyl \rightarrow$ $\rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow [CH_3O]$	0.00083204



79	$[CH_3]CH_3OO+C_3H_8=>CH_3OOH+ipropyl-->[CH_3OOH]CH_3OOH=>CH_3O+OH--$ $>[CH_3O]CH_3O+M=>CH_2O+H+M--$ $>[CH_2O]ipropylooh+CH_2O=>ipropylooh+HCO--$ $>[ipropylooh]ipropylooh=>ipropyloxy+OH--$ $>[ipropyloxy]ipropyloxy=>CH_3+acetaldehyde--$ $>[acetaldehyde]CH_3OO+acetaldehyde=>CH_3OOH+acetyl--$ $>[CH_3OOH]CH_3OOH=>CH_3O+OH-->[CH_3O]$	0.00073732
91	$[CH_3]CH_3OO+C_3H_8=>CH_3OOH+ipropyl-->[CH_3OOH]CH_3OOH=>CH_3O+OH--$ $>[CH_3O]CH_3O+M=>CH_2O+H+M--$ $>[CH_2O]CH_3CH_2OO+CH_2O=>CH_3CH_2OOH+HCO--$ $>[CH_3CH_2OOH]CH_3CH_2OOH=>ethoxy+OH-->[ethoxy]ethoxy=>CH_3+CH_2O-$ $->[CH_3]CH_3OO+C_3H_8=>CH_3OOH+ipropyl--$ $>[CH_3OOH]CH_3OOH=>CH_3O+OH-->[CH_3O]$	0.00072458
32	$[CH_3]CH_3OO+C_3H_8=>CH_3OOH+ipropyl-->[CH_3OOH]CH_3OOH=>CH_3O+OH--$ $>[CH_3O]CH_3O+O_2=>CH_2O+HO_2--$ $>[CH_2O]CH_2O+acetylperoxy=>HCO+CH_3CO_3H--$ $>[CH_3CO_3H]CH_3CO_3H=>acetyloxy+OH-->[acetyloxy]$	0.00071546
85	$[CH_3]CH_3OO+C_3H_8=>CH_3OOH+ipropyl-->[CH_3OOH]CH_3OOH=>CH_3O+OH--$ $>[CH_3O]CH_3O+O_2=>CH_2O+HO_2--$ $>[CH_2O]npropylooh+CH_2O=>npropylooh+HCO--$ $>[npropylooh]npropylooh=>npropyloxy+OH--$ $>[npropyloxy]npropyloxy=>C_2H_5+CH_2O--$ $>[CH_2O]CH_3OO+CH_2O=>CH_3OOH+HCO--$ $>[CH_3OOH]CH_3OOH=>CH_3O+OH-->[CH_3O]$	0.00068557
99	$[CH_3]CH_3OO+C_3H_8=>CH_3OOH+npropyl-->[CH_3OOH]CH_3OOH=>CH_3O+OH-$ $->[CH_3O]CH_3O+O_2=>CH_2O+HO_2--$ $>[CH_2O]npropylooh+CH_2O=>npropylooh+HCO--$ $>[npropylooh]npropylooh=>npropyloxy+OH--$ $>[npropyloxy]npropyloxy=>C_2H_5+CH_2O--$ $>[C_2H_5]CH_3CH_2OO+CH_2O=>CH_3CH_2OOH+HCO--$ $>[CH_3CH_2OOH]CH_3CH_2OOH=>ethoxy+OH-->[ethoxy]$	0.00067433

94	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + npropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow [CH_3O]CH_3O + M \Rightarrow CH_2O + H + M$ $>[CH_2O]npropylo + CH_2O \Rightarrow npropylooh + HCO$ $>[npropylooh]npropylooh \Rightarrow npropyloxy + OH$ $>[npropyloxy]npropyloxy \Rightarrow C_2H_5 + CH_2O$ $>[C_2H_5]CH_3CH_2OO + HO_2 \Rightarrow CH_3CH_2OOH + O_2$ $>[CH_3CH_2OOH]CH_3CH_2OOH \Rightarrow ethoxy + OH \rightarrow [ethoxy]ethoxy \Rightarrow CH_3 + CH_2O$ $\rightarrow [CH_3]CH_3OO + HO_2 \Rightarrow CH_3OOH + O_2 \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH$ $>[CH_3O]$	0.00066543
23	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + ipropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH$ $>[CH_3O]CH_3O + O_2 \Rightarrow CH_2O + HO_2$ $>[CH_2O]CH_2O + formylperoxy \Rightarrow HCO + formylooh$ $>[formylooh]formylooh \Rightarrow formyloxy + OH \rightarrow [formyloxy]$	0.00064983
82	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + npropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH$ $\rightarrow [CH_3O]CH_3O + O_2 \Rightarrow CH_2O + HO_2$ $>[CH_2O]ipropylo + CH_2O \Rightarrow ipropylooh + HCO$ $>[ipropylooh]ipropylooh \Rightarrow ipropyloxy + OH$ $>[ipropyloxy]ipropyloxy \Rightarrow CH_3 + acetaldehyde$ $>[acetaldehyde]acetaldehyde + HO_2 \Rightarrow acetyl + H_2O_2$ $>[acetyl]acetyl(+M) \Rightarrow CH_3 + CO(+M) \rightarrow [CH_3]CH_3OO + HO_2 \Rightarrow CH_3OOH + O_2$ $>[CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow [CH_3O]$	0.00061461
100	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + npropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH$ $\rightarrow [CH_3O]CH_3O + O_2 \Rightarrow CH_2O + HO_2$ $>[CH_2O]CH_3CH_2OO + CH_2O \Rightarrow CH_3CH_2OOH + HCO$ $>[CH_3CH_2OOH]CH_3CH_2OOH \Rightarrow ethoxy + OH \rightarrow [ethoxy]ethoxy \Rightarrow CH_3 + CH_2O$ $\rightarrow [CH_3]CH_3OO + CH_2O \Rightarrow CH_3OOH + HCO \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH$ $>[CH_3O]$	0.00058687
35	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + ipropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH$ $>[CH_3O]CH_3O + M \Rightarrow CH_2O + H + M$ $>[CH_2O]CH_2O + acetylperoxy \Rightarrow HCO + CH_3CO_3H$ $>[CH_3CO_3H]CH_3CO_3H \Rightarrow acetyloxy + OH \rightarrow [acetyloxy]$	0.00056219

97	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + ipropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH--$ $>[CH_3O]CH_3O + M \Rightarrow CH_2O + H + M--$ $>[CH_2O]npropyloo + CH_2O \Rightarrow npropylooh + HCO--$ $>[npropylooh]npropylooh \Rightarrow npropyloxy + OH--$ $>[npropyloxy]npropyloxy \Rightarrow C_2H_5 + CH_2O--$ $>[CH_2O]CH_3OO + CH_2O \Rightarrow CH_3OOH + HCO--$ $>[CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH-- \rightarrow [CH_3O]$	0.00053073
26	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + ipropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH--$ $>[CH_3O]CH_3O + M \Rightarrow CH_2O + H + M--$ $>[CH_2O]CH_2O + formylperoxy \Rightarrow HCO + formylooh--$ $>[formylooh]formylooh \Rightarrow formyloxy + OH-- \rightarrow [formyloxy]$	0.00051228
93	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + npropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH--$ $\rightarrow [CH_3O]CH_3O + M \Rightarrow CH_2O + H + M--$ $>[CH_2O]ipropyloo + CH_2O \Rightarrow ipropylooh + HCO--$ $>[ipropylooh]ipropylooh \Rightarrow ipropyloxy + OH--$ $>[ipropyloxy]ipropyloxy \Rightarrow CH_3 + acetaldehyde--$ $>[acetaldehyde]acetaldehyde + HO_2 \Rightarrow acetyl + H_2O_2--$ $>[acetyl]acetyl(+M) \Rightarrow CH_3 + CO(+M) \rightarrow [CH_3]CH_3OO + HO_2 \Rightarrow CH_3OOH + O_2--$ $>[CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH-- \rightarrow [CH_3O]$	0.00047728
83	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + ipropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH--$ $>[CH_3O]CH_3O + O_2 \Rightarrow CH_2O + HO_2--$ $>[CH_2O]CH_2O + acetylperoxy \Rightarrow HCO + CH_3CO_3H--$ $>[CH_3CO_3H]CH_3CO_3H \Rightarrow acetyloxy + OH--$ $>[acetyloxy]acetyloxy + M \Rightarrow CH_3 + CO_2 + M--$ $>[CH_3]CH_3OO + HO_2 \Rightarrow CH_3OOH + O_2-- \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH--$ $>[CH_3O]$	0.00043444
95	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + ipropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH--$ $>[CH_3O]CH_3O + M \Rightarrow CH_2O + H + M--$ $>[CH_2O]CH_2O + acetylperoxy \Rightarrow HCO + CH_3CO_3H--$ $>[CH_3CO_3H]CH_3CO_3H \Rightarrow acetyloxy + OH--$ $>[acetyloxy]acetyloxy + M \Rightarrow CH_3 + CO_2 + M--$ $>[CH_3]CH_3OO + HO_2 \Rightarrow CH_3OOH + O_2-- \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH--$ $>[CH_3O]$	0.00034296

67	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + ipropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow$ $\rightarrow [CH_3O]CH_3O + O_2 \Rightarrow CH_2O + HO_2 \rightarrow$ $\rightarrow [CH_2O]ipropylooh + CH_2O \Rightarrow ipropylooh + HCO \rightarrow$ $\rightarrow [ipropylooh]ipropylooh \Rightarrow ipropyloxy + OH \rightarrow$ $\rightarrow [ipropyloxy]ipropyloxy \Rightarrow CH_3 + acetaldehyde \rightarrow$ $\rightarrow [acetaldehyde]acetaldehyde + OH \Rightarrow vinoxy + H_2O \rightarrow$ $\rightarrow [vinoxy]vinoxy + O_2 \Rightarrow CH_2O + CO + OH \rightarrow [CO]$	0.00033551
77	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + ipropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow$ $\rightarrow [CH_3O]CH_3O + O_2 \Rightarrow CH_2O + HO_2 \rightarrow [CH_2O]CH_3OO + CH_2O \Rightarrow CH_3OOH + HCO \rightarrow$ $\rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow [CH_3O]CH_3O + M \Rightarrow CH_2O + H + M \rightarrow$ $\rightarrow [CH_2O]CH_3OO + CH_2O \Rightarrow CH_3OOH + HCO \rightarrow$ $\rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow [CH_3O]$	0.0003319
81	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + ipropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow$ $\rightarrow [CH_3O]CH_3O + O_2 \Rightarrow CH_2O + HO_2 \rightarrow [CH_2O]CH_3OO + CH_2O \Rightarrow CH_3OOH + HCO \rightarrow$ $\rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow [CH_3O]CH_3O + O_2 \Rightarrow CH_2O + HO_2 \rightarrow$ $\rightarrow [CH_2O]CH_3OO + CH_2O \Rightarrow CH_3OOH + HCO \rightarrow$ $\rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow [CH_3O]$	0.00032457
33	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + ipropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow$ $\rightarrow [CH_3O]CH_3O + O_2 \Rightarrow CH_2O + HO_2 \rightarrow [CH_2O]CH_2O + OH \Rightarrow HCO + H_2O \rightarrow$ $\rightarrow [HCO]HCO + O_2 \Rightarrow formylperoxy \rightarrow$ $\rightarrow [formylperoxy]CH_2O + formylperoxy \Rightarrow HCO + formylooh \rightarrow$ $\rightarrow [formylooh]formylooh \Rightarrow formyloxy + OH \rightarrow [formyloxy]$	0.00031683
96	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + ipropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow$ $\rightarrow [CH_3O]CH_3O + O_2 \Rightarrow CH_2O + HO_2 \rightarrow [CH_2O]CH_3OO + CH_2O \Rightarrow CH_3OOH + HCO \rightarrow$ $\rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow [CH_3O]CH_3O + M \Rightarrow CH_2O + H + M \rightarrow$ $\rightarrow [CH_2O]npropylooh + CH_2O \Rightarrow npropylooh + HCO \rightarrow$ $\rightarrow [npropylooh]npropylooh \Rightarrow npropyloxy + OH \rightarrow [npropyloxy]$	0.00029232
25	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + ipropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow$ $\rightarrow [CH_3O]CH_3O + O_2 \Rightarrow CH_2O + HO_2 \rightarrow [CH_2O]CH_2O + OH \Rightarrow HCO + H_2O \rightarrow$ $\rightarrow [HCO]HCO + O_2 \Rightarrow CO + HO_2 \rightarrow [CO]CO + HO_2 \Rightarrow CO_2 + OH \rightarrow [CO_2]$	0.00026163

78	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + ipropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow$ $\rightarrow [CH_3O]CH_3O + M \Rightarrow CH_2O + H + M \rightarrow$ $\rightarrow [CH_2O]ipropylooh + CH_2O \Rightarrow ipropylooh + HCO \rightarrow$ $\rightarrow [ipropylooh]ipropylooh \Rightarrow ipropyloxy + OH \rightarrow$ $\rightarrow [ipropyloxy]ipropyloxy \Rightarrow CH_3 + acetaldehyde \rightarrow$ $\rightarrow [acetaldehyde]acetaldehyde + OH \Rightarrow vinoxy + H_2O \rightarrow$ $\rightarrow [vinoxy]vinoxy + O_2 \Rightarrow CH_2O + CO + OH \rightarrow [CO]$	0.00025843
92	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + ipropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow$ $\rightarrow [CH_3O]CH_3O + M \Rightarrow CH_2O + H + M \rightarrow [CH_2O]CH_3OO + CH_2O \Rightarrow CH_3OOH + HCO \rightarrow$ $\rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow [CH_3O]CH_3O + M \Rightarrow CH_2O + H + M \rightarrow$ $\rightarrow [CH_2O]CH_3OO + CH_2O \Rightarrow CH_3OOH + HCO \rightarrow$ $\rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow [CH_3O]$	0.00025817
36	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + ipropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow$ $\rightarrow [CH_3O]CH_3O + M \Rightarrow CH_2O + H + M \rightarrow [CH_2O]CH_2O + OH \Rightarrow HCO + H_2O \rightarrow$ $\rightarrow [HCO]HCO + O_2 \Rightarrow formylperoxy \rightarrow$ $\rightarrow [formylperoxy]CH_2O + formylperoxy \Rightarrow HCO + formylooh \rightarrow$ $\rightarrow [formylooh]formylooh \Rightarrow formyloxy + OH \rightarrow [formyloxy]$	0.00024992
37	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + ipropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow$ $\rightarrow [CH_3O]CH_3O + O_2 \Rightarrow CH_2O + HO_2 \rightarrow [CH_2O]CH_2O + OH \Rightarrow HCO + H_2O \rightarrow$ $\rightarrow [HCO]HCO + O_2 \Rightarrow formylperoxy \rightarrow$ $\rightarrow [formylperoxy]C_3H_8 + formylperoxy \Rightarrow ipropyl + formylooh \rightarrow$ $\rightarrow [formylooh]formylooh \Rightarrow formyloxy + OH \rightarrow [formyloxy]$	0.00024262
56	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + npropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow$ $\rightarrow [CH_3O]CH_3O + O_2 \Rightarrow CH_2O + HO_2 \rightarrow$ $\rightarrow [CH_2O]CH_2O + acetylperoxy \Rightarrow HCO + CH_3CO_3H \rightarrow$ $\rightarrow [CH_3CO_3H]CH_3CO_3H \Rightarrow acetyloxy + OH \rightarrow [acetyloxy]$	0.00024037
47	$[CH_3]CH_3OO + HO_2 \Rightarrow CH_3OOH + O_2 \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow$ $\rightarrow [CH_3O]$	0.00023618
38	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + npropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow$ $\rightarrow [CH_3O]CH_3O + O_2 \Rightarrow CH_2O + HO_2 \rightarrow$ $\rightarrow [CH_2O]CH_2O + formylperoxy \Rightarrow HCO + formylooh \rightarrow$ $\rightarrow [formylooh]formylooh \Rightarrow formyloxy + OH \rightarrow [formyloxy]$	0.00021856
29	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + ipropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow$ $\rightarrow [CH_3O]CH_3O + M \Rightarrow CH_2O + H + M \rightarrow [CH_2O]CH_2O + OH \Rightarrow HCO + H_2O \rightarrow$ $\rightarrow [HCO]HCO + O_2 \Rightarrow CO + HO_2 \rightarrow [CO]CO + HO_2 \Rightarrow CO_2 + OH \rightarrow [CO_2]$	0.00020239

62	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + npropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow [CH_3O]CH_3O + M \Rightarrow CH_2O + H + M \rightarrow [CH_2O]CH_2O + acetylperoxy \Rightarrow HCO + CH_3CO_3H \rightarrow [CH_3CO_3H]CH_3CO_3H \Rightarrow acetyloxy + OH \rightarrow [acetyloxy]$	0.00018741
39	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + ipropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow [CH_3O]CH_3O + M \Rightarrow CH_2O + H + M \rightarrow [CH_2O]CH_2O + OH \Rightarrow HCO + H_2O \rightarrow [HCO]HCO + O_2 \Rightarrow formylperoxy \rightarrow [formylperoxy]C_3H_8 + formylperoxy \Rightarrow ipropyl + formylooh \rightarrow [formylooh]formylooh \Rightarrow formyloxy + OH \rightarrow [formyloxy]$	0.00018627
44	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + npropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow [CH_3O]CH_3O + M \Rightarrow CH_2O + H + M \rightarrow [CH_2O]CH_2O + formylperoxy \Rightarrow HCO + formylooh \rightarrow [formylooh]formylooh \Rightarrow formyloxy + OH \rightarrow [formyloxy]$	0.00017073
90	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + ipropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow [CH_3O]CH_3O + O_2 \Rightarrow CH_2O + HO_2 \rightarrow [CH_2O]CH_2O + OH \Rightarrow HCO + H_2O \rightarrow [HCO]HCO + O_2 \Rightarrow formylperoxy \rightarrow [formylperoxy]CH_2O + formylperoxy \Rightarrow HCO + formylooh \rightarrow [formylooh]formylooh \Rightarrow formyloxy + OH \rightarrow [formyloxy]$	0.00016113
59	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + ipropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow [CH_3O]CH_3O + O_2 \Rightarrow CH_2O + HO_2 \rightarrow [CH_2O]CH_2O + HO_2 \Rightarrow HCO + H_2O \rightarrow [HCO]HCO + O_2 \Rightarrow formylperoxy \rightarrow [formylperoxy]CH_2O + formylperoxy \Rightarrow HCO + formylooh \rightarrow [formylooh]formylooh \Rightarrow formyloxy + OH \rightarrow [formyloxy]$	0.00010754
58	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + npropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow [CH_3O]CH_3O + O_2 \Rightarrow CH_2O + HO_2 \rightarrow [CH_2O]CH_2O + OH \Rightarrow HCO + H_2O \rightarrow [HCO]HCO + O_2 \Rightarrow formylperoxy \rightarrow [formylperoxy]CH_2O + formylperoxy \Rightarrow HCO + formylooh \rightarrow [formylooh]formylooh \Rightarrow formyloxy + OH \rightarrow [formyloxy]$	0.0001064
61	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + ipropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow [CH_3O]CH_3O + O_2 \Rightarrow CH_2O + HO_2 \rightarrow [CH_2O]CH_2O + OH \Rightarrow HCO + H_2O \rightarrow [HCO]HCO + O_2 \Rightarrow formylperoxy \rightarrow [formylperoxy]C_3H_8 + formylperoxy \Rightarrow npropyl + formylooh \rightarrow [formylooh]formylooh \Rightarrow formyloxy + OH \rightarrow [formyloxy]$	9.6802E-05

42	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + npropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow [CH_3O]CH_3O + O_2 \Rightarrow CH_2O + HO_2 \rightarrow [CH_2O]CH_2O + OH \Rightarrow HCO + H_2O \rightarrow [HCO]HCO + O_2 \Rightarrow CO + HO_2 \rightarrow [CO]CO + HO_2 \Rightarrow CO_2 + OH \rightarrow [CO_2]$	8.6157E-05
45	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + ipropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow [CH_3O]CH_3O + O_2 \Rightarrow CH_2O + HO_2 \rightarrow [CH_2O]CH_2O + O \Rightarrow HCO + OH \rightarrow [HCO]$	8.5093E-05
63	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + ipropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow [CH_3O]CH_3O + M \Rightarrow CH_2O + H + M \rightarrow [CH_2O]CH_2O + HO_2 \Rightarrow HCO + H_2O \rightarrow [HCO]HCO + O_2 \Rightarrow formylperoxy \rightarrow [formylperoxy]CH_2O + formylperoxy \Rightarrow HCO + formyllooh \rightarrow [formyllooh]formyllooh \Rightarrow formyloxy + OH \rightarrow [formyloxy]$	8.4392E-05
70	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + npropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow [CH_3O]CH_3O + M \Rightarrow CH_2O + H + M \rightarrow [CH_2O]CH_2O + OH \Rightarrow HCO + H_2O \rightarrow [HCO]HCO + O_2 \Rightarrow formylperoxy \rightarrow [formylperoxy]CH_2O + formylperoxy \Rightarrow HCO + formyllooh \rightarrow [formyllooh]formyllooh \Rightarrow formyloxy + OH \rightarrow [formyloxy]$	8.2772E-05
46	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + ipropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow [CH_3O]CH_3O + O_2 \Rightarrow CH_2O + HO_2 \rightarrow [CH_2O]CH_2O + HO_2 \Rightarrow HCO + H_2O \rightarrow [HCO]HCO + O_2 \Rightarrow CO + HO_2 \rightarrow [CO]CO + HO_2 \Rightarrow CO_2 + OH \rightarrow [CO_2]$	8.0842E-05
68	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + npropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow [CH_3O]CH_3O + O_2 \Rightarrow CH_2O + HO_2 \rightarrow [CH_2O]CH_2O + OH \Rightarrow HCO + H_2O \rightarrow [HCO]HCO + O_2 \Rightarrow formylperoxy \rightarrow [formylperoxy]C_3H_8 + formylperoxy \Rightarrow ipropyl + formyllooh \rightarrow [formyllooh]formyllooh \Rightarrow formyloxy + OH \rightarrow [formyloxy]$	7.986E-05
71	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + ipropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow [CH_3O]CH_3O + M \Rightarrow CH_2O + H + M \rightarrow [CH_2O]CH_2O + OH \Rightarrow HCO + H_2O \rightarrow [HCO]HCO + O_2 \Rightarrow formylperoxy \rightarrow [formylperoxy]C_3H_8 + formylperoxy \Rightarrow npropyl + formyllooh \rightarrow [formyllooh]formyllooh \Rightarrow formyloxy + OH \rightarrow [formyloxy]$	7.5741E-05
52	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + npropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow [CH_3O]CH_3O + M \Rightarrow CH_2O + H + M \rightarrow [CH_2O]CH_2O + OH \Rightarrow HCO + H_2O \rightarrow [HCO]HCO + O_2 \Rightarrow CO + HO_2 \rightarrow [CO]CO + HO_2 \Rightarrow CO_2 + OH \rightarrow [CO_2]$	6.7914E-05

73	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + ipropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow$ $\rightarrow [CH_3O]CH_3O + O_2 \Rightarrow CH_2O + HO_2 \rightarrow [CH_2O]CH_2O + HO_2 \Rightarrow HCO + H_2O_2 \rightarrow$ $\rightarrow [HCO]HCO + O_2 \Rightarrow formylperoxy \rightarrow$ $\rightarrow [formylperoxy]C_3H_8 + formylperoxy \Rightarrow ipropyl + formyllooh \rightarrow$ $\rightarrow [formyllooh]formyllooh \Rightarrow formyloxy + OH \rightarrow [formyloxy]$	6.712E-05
53	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + ipropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow$ $\rightarrow [CH_3O]CH_3O + M \Rightarrow CH_2O + H + M \rightarrow [CH_2O]CH_2O + O \Rightarrow HCO + OH \rightarrow [HCO]$	6.6415E-05
55	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + ipropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow$ $\rightarrow [CH_3O]CH_3O + M \Rightarrow CH_2O + H + M \rightarrow [CH_2O]CH_2O + HO_2 \Rightarrow HCO + H_2O_2 \rightarrow$ $\rightarrow [HCO]HCO + O_2 \Rightarrow CO + HO_2 \rightarrow [CO]CO + HO_2 \Rightarrow CO_2 + OH \rightarrow [CO_2]$	6.3377E-05
80	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + npropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow$ $\rightarrow [CH_3O]CH_3O + M \Rightarrow CH_2O + H + M \rightarrow [CH_2O]CH_2O + OH \Rightarrow HCO + H_2O \rightarrow$ $\rightarrow [HCO]HCO + O_2 \Rightarrow formylperoxy \rightarrow$ $\rightarrow [formylperoxy]C_3H_8 + formylperoxy \Rightarrow ipropyl + formyllooh \rightarrow$ $\rightarrow [formyllooh]formyllooh \Rightarrow formyloxy + OH \rightarrow [formyloxy]$	6.179E-05
87	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + ipropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow$ $\rightarrow [CH_3O]CH_3O + M \Rightarrow CH_2O + H + M \rightarrow [CH_2O]CH_2O + HO_2 \Rightarrow HCO + H_2O_2 \rightarrow$ $\rightarrow [HCO]HCO + O_2 \Rightarrow formylperoxy \rightarrow$ $\rightarrow [formylperoxy]C_3H_8 + formylperoxy \Rightarrow ipropyl + formyllooh \rightarrow$ $\rightarrow [formyllooh]formyllooh \Rightarrow formyloxy + OH \rightarrow [formyloxy]$	5.2787E-05
66	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + ipropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow$ $\rightarrow [CH_3O]CH_3O + O_2 \Rightarrow CH_2O + HO_2 \rightarrow [CH_2O]CH_2O + OH \Rightarrow HCO + H_2O \rightarrow$ $\rightarrow [HCO]HCO + HO_2 \Rightarrow CO_2 + OH + H \rightarrow [CO_2]$	4.2467E-05
75	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + ipropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow$ $\rightarrow [CH_3O]CH_3O + M \Rightarrow CH_2O + H + M \rightarrow [CH_2O]CH_2O + OH \Rightarrow HCO + H_2O \rightarrow$ $\rightarrow [HCO]HCO + HO_2 \Rightarrow CO_2 + OH + H \rightarrow [CO_2]$	3.3944E-05
86	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + npropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow$ $\rightarrow [CH_3O]CH_3O + O_2 \Rightarrow CH_2O + HO_2 \rightarrow [CH_2O]CH_2O + O \Rightarrow HCO + OH \rightarrow [HCO]$	2.8014E-05
88	$[CH_3]CH_3OO + C_3H_8 \Rightarrow CH_3OOH + npropyl \rightarrow [CH_3OOH]CH_3OOH \Rightarrow CH_3O + OH \rightarrow$ $\rightarrow [CH_3O]CH_3O + O_2 \Rightarrow CH_2O + HO_2 \rightarrow [CH_2O]CH_2O + HO_2 \Rightarrow HCO + H_2O_2 \rightarrow$ $\rightarrow [HCO]HCO + O_2 \Rightarrow CO + HO_2 \rightarrow [CO]CO + HO_2 \Rightarrow CO_2 + OH \rightarrow [CO_2]$	2.7431E-05