```
1|[nR]O_2QOOH_1=>OH+OQ'OOH_1-->[OQ'OOH_1]
 2|[nR]O_2QOOH_1=>OH+OQ'OOH_1-->[OQ'OOH_1]OQ'OOH_1=>OQ'O_1+OH-->[OQ'O_1]
   [nR]O_2QOOH_1 => OH + OQ'OOH_1 --> [OQ'OOH_1]OQ'OOH_1 => OQ'O_1 + OH --
 3 > [OQ'O_1]OQ'O_1 = vinoxy + CH_2O - > [vinoxy]vinoxy + O_2 = > CH_2O + CO + OH - - > [CO]
 4[nR]nROO+C_3H_8=>nROOH+iR-->[nROOH]nROOH=>nRO+OH-->[nRO]
   [nR]nROO+C<sub>3</sub>H<sub>8</sub>=>nROOH+iR-->[iR]iROO+C<sub>3</sub>H<sub>8</sub>=>iROOH+iR--
 5 |>[iROOH]iROOH=>iRO+OH-->[iRO]
 6 | [nR] nROO + C_3 H_8 = > nROOH + nR - > [nROOH] nROOH = > nRO + OH - - > [nRO]
   [nR]O_2QOOH_1 => OH + OQ'OOH_1 --> [OQ'OOH_1]OQ'OOH_1 => OQ'O_1 + OH --
   >[OQ'O_1]OQ'O_1=>vinoxy+CH_2O-->[CH_2O]iROO+CH_2O=>iROOH+HCO--
 7 > [iROOH]iROOH=>iRO+OH-->[iRO]
   [nR]O_2QOOH_1 => OH + OQ'OOH_1 --> [OQ'OOH_1]OQ'OOH_1 => OQ'O_1 + OH --
   >[OQ'O<sub>1</sub>]OQ'O<sub>1</sub>=>vinoxy+CH<sub>2</sub>O-->[CH<sub>2</sub>O]CH<sub>3</sub>OO+CH<sub>2</sub>O=>CH<sub>3</sub>OOH+HCO--
 8 > [CH<sub>3</sub>OOH] CH<sub>3</sub>OOH=> CH<sub>3</sub>O+OH--> [CH<sub>3</sub>O]
   [nR]O_2QOOH_1 => OH + OQ'OOH_1 --> [OQ'OOH_1]OQ'OOH_1 => OQ'O_1 + OH --
   >[OQ'O_1]OQ'O_1=>vinoxy+CH_2O-->[vinoxy]vinoxy+O_2=>CH_2O+CO+OH--
 9|>[CH<sub>2</sub>O]iROO+CH<sub>2</sub>O=>iROOH+HCO-->[iROOH]iROOH=>iRO+OH-->[iRO]
   [nR]O_2QOOH_1 => OH + OQ'OOH_1 -> [OQ'OOH_1]OQ'OOH_1 => OQ'O_1 + OH --
   >[OQ'O_1]OQ'O_1=>vinoxy+CH_2O-->[CH_2O]nROO+CH_2O=>nROOH+HCO--
10 > [nROOH] nROOH => nRO+OH--> [nRO]
   [nR]O_2QOOH_1 => OH + OQ'OOH_1 --> [OQ'OOH_1]OQ'OOH_1 => OQ'O_1 + OH --
   >[OQ'O_1]OQ'O_1=>vinoxy+CH_2O-->[vinoxy]vinoxy+O_2=>CH_2O+CO+OH--
11 > [CH<sub>2</sub>O]CH<sub>3</sub>OO+CH<sub>2</sub>O=>CH<sub>3</sub>OOH+HCO--> [CH<sub>3</sub>OOH]CH<sub>3</sub>OOH=>CH<sub>3</sub>O+OH--> [CH<sub>3</sub>O]
   [nR]O_2QOOH_1 => OH + OQ'OOH_1 --> [OQ'OOH_1]OQ'OOH_1 => OQ'O_1 + OH --
   >[OQ'O_1]OQ'O_1=>vinoxy+CH_2O-->[CH_2O]CH_2O+acetylperoxy=>HCO+CH_3CO_3H--
12 > [CH<sub>3</sub>CO<sub>3</sub>H]CH<sub>3</sub>CO<sub>3</sub>H=>acetyloxy+OH-->[acetyloxy]
   [nR]O_2QOOH_1 => OH + OQ'OOH_1 --> [OQ'OOH_1]OQ'OOH_1 => OQ'O_1 + OH --
   >[OQ'O_1]OQ'O_1=>vinoxy+CH_2O-->[vinoxy]vinoxy+O_2=>CH_2O+CO+OH--
13 > [CH<sub>2</sub>O]nROO+CH<sub>2</sub>O=>nROOH+HCO-->[nROOH]nROOH=>nRO+OH-->[nRO]
   [nR]nROO+C<sub>3</sub>H<sub>8</sub>=>nROOH+iR-->[nROOH]nROOH=>nRO+OH--
   >[nRO]nRO=>C_2H_5+CH_2O-->[C_2H_5]CH_3CH_2OO+C_3H_8=>CH_3CH_2OOH+iR--
|14| > [iR]iROO + C<sub>3</sub>H<sub>8</sub> = > iROOH + iR --> [iROOH]iROOH = > iRO + OH --> [iRO]
   [nR]nROO+C_3H_8=>nROOH+iR-->[iR]iROO+C_3H_8=>iROOH+nR--
15 > [iROOH] iROOH => iRO+OH--> [iRO]
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[nR]nROO+C<sub>3</sub>H<sub>8</sub>=>nROOH+iR-->[nROOH]nROOH=>nRO+OH--
    >[nRO]nRO=>C_2H_5+CH_2O-->[C_2H_5]CH_3CH_2OO+C_3H_8=>CH_3CH_2OOH+iR--
16 > [CH<sub>3</sub>CH<sub>2</sub>OOH] CH<sub>3</sub>CH<sub>2</sub>OOH=> ethoxy+OH--> [ethoxy]
    [nR]O<sub>2</sub>QOOH<sub>1</sub>=>OH+OQ'OOH<sub>1</sub>-->[OQ'OOH<sub>1</sub>]OQ'OOH<sub>1</sub>=>OQ'O<sub>1</sub>+OH--
    >[OQ'O<sub>1</sub>]OQ'O<sub>1</sub>=>vinoxy+CH<sub>2</sub>O-->[CH<sub>2</sub>O]CH<sub>3</sub>CH<sub>2</sub>OO+CH<sub>2</sub>O=>CH<sub>3</sub>CH<sub>2</sub>OOH+HCO--
17 > [CH<sub>3</sub>CH<sub>2</sub>OOH]CH<sub>3</sub>CH<sub>2</sub>OOH=>ethoxy+OH-->[ethoxy]
    [nR]O<sub>2</sub>QOOH<sub>1</sub>=>OH+OQ'OOH<sub>1</sub>-->[OQ'OOH<sub>1</sub>]OQ'OOH<sub>1</sub>=>OQ'O<sub>1</sub>+OH--
    >[OQ'O_1]OQ'O_1=>vinoxy+CH_2O-->[CH_2O]CH_2O+formy|peroxy=>HCO+formy|ooh--
18 > [formylooh] formylooh => formyloxy + OH--> [formyloxy]
    [nR]nROO+C_3H_8=>nROOH+iR-->[iR]iROO+C_3H_8=>iROOH+nR--
|19| > [nR]O_2QOOH_1 = > OH + OQ'OOH_1 - > [OQ'OOH_1]
    [nR]nROO+C_3H_8=>nROOH+iR-->[iR]iROO+C_3H_8=>iROOH+nR--
20|>[nR]O_2QOOH_1=>OH+OQ'OOH_1-->[OQ'OOH_1]OQ'OOH_1=>OQ'O_1+OH-->[OQ'O_1]
    [nR]O_2QOOH_1 => OH + OQ'OOH_1 --> [OQ'OOH_1]OQ'OOH_1 => OQ'O_1 + OH --
    >[OQ'O_1]OQ'O_1=>vinoxy+CH_2O-->[vinoxy]vinoxy+O_2=>CH_2O+CO+OH--
    >[CH<sub>2</sub>O]CH<sub>2</sub>O+acetylperoxy=>HCO+CH<sub>3</sub>CO<sub>3</sub>H-->[CH<sub>3</sub>CO<sub>3</sub>H]CH<sub>3</sub>CO<sub>3</sub>H=>acetyloxy+OH-
21 > [acetyloxy]
    [nR]nROO+C_3H_8=>nROOH+iR-->[iR]iROO+C_3H_8=>iROOH+nR--
    >[nR]O<sub>2</sub>QOOH<sub>1</sub>=>OH+OQ'OOH<sub>1</sub>-->[OQ'OOH<sub>1</sub>]OQ'OOH<sub>1</sub>=>OQ'O<sub>1</sub>+OH--
22 > [OQ'O<sub>1</sub>]OQ'O<sub>1</sub> => vinoxy + CH<sub>2</sub>O--> [vinoxy] vinoxy + O<sub>2</sub> => CH<sub>2</sub>O + CO + OH--> [CO]
    [nR]nROO+C3H8=>nROOH+iR-->[iR]iROO+C3H8=>iROOH+iR--
    >[iROOH]iROOH=>iRO+OH-->[iRO]iRO=>CH3+acetaldehyde--
23|>[CH<sub>3</sub>]CH<sub>3</sub>OO+C<sub>3</sub>H<sub>8</sub>=>CH<sub>3</sub>OOH+iR-->[CH<sub>3</sub>OOH]CH<sub>3</sub>OOH=>CH<sub>3</sub>O+OH-->[CH<sub>3</sub>O]
    [nR]nROO+C<sub>3</sub>H<sub>8</sub>=>nROOH+nR-->[nROOH]nROOH=>nRO+OH--
    >[nRO]nRO=>C_2H_5+CH_2O-->[C_2H_5]CH_3CH_2OO+C_3H_8=>CH_3CH_2OOH+iR--
24 > [iR]iROO + C_3H_8 = > iROOH + iR --> [iROOH]iROOH = > iRO + OH --> [iRO]
    [nR]nROO+C<sub>3</sub>H<sub>8</sub>=>nROOH+nR-->[nROOH]nROOH=>nRO+OH--
    >[nRO]nRO=>C_2H_5+CH_2O-->[C_2H_5]CH_3CH_2OO+C_3H_8=>CH_3CH_2OOH+iR--
25 > [CH<sub>3</sub>CH<sub>2</sub>OOH]CH<sub>3</sub>CH<sub>2</sub>OOH=>ethoxy+OH-->[ethoxy]
    [nR]O<sub>2</sub>QOOH<sub>1</sub>=>OH+OQ'OOH<sub>1</sub>-->[OQ'OOH<sub>1</sub>]OQ'OOH<sub>1</sub>=>OQ'O<sub>1</sub>+OH--
    >[OQ'O_1]OQ'O_1=>vinoxy+CH_2O-->[vinoxy]vinoxy+O_2=>CH_2O+CO+OH--
    >[CH<sub>2</sub>O]CH<sub>3</sub>CH<sub>2</sub>OO+CH<sub>2</sub>O=>CH<sub>3</sub>CH<sub>2</sub>OOH+HCO--
26 > [CH<sub>3</sub>CH<sub>2</sub>OOH]CH<sub>3</sub>CH<sub>2</sub>OOH=>ethoxy+OH-->[ethoxy]
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[nR]nROO+C<sub>3</sub>H<sub>8</sub>=>nROOH+iR-->[nROOH]nROOH=>nRO+OH--
   >[nRO]nRO=>C<sub>2</sub>H<sub>5</sub>+CH<sub>2</sub>O-->[C<sub>2</sub>H<sub>5</sub>]CH<sub>3</sub>CH<sub>2</sub>OO+C<sub>3</sub>H<sub>8</sub>=>CH<sub>3</sub>CH<sub>2</sub>OOH+nR--
27 > [nR]O_2QOOH_1 = > OH + OQ'OOH_1 - > [OQ'OOH_1]
   [nR]nROO+C<sub>3</sub>H<sub>8</sub>=>nROOH+iR-->[nROOH]nROOH=>nRO+OH--
   >[nRO]nRO=>C_2H_5+CH_2O-->[C_2H_5]CH_3CH_2OO+C_3H_8=>CH_3CH_2OOH+nR--
28|>[nR]O_2QOOH_1=>OH+OQ'OOH_1-->[OQ'OOH_1]OQ'OOH_1=>OQ'O_1+OH-->[OQ'O_1]
   [nR]nROO+C<sub>3</sub>H<sub>8</sub>=>nROOH+iR-->[iR]iROO+C<sub>3</sub>H<sub>8</sub>=>iROOH+iR--
   >[iROOH]iROOH=>iRO+OH-->[iRO]iRO=>CH3+acetaldehyde--
   >[CH<sub>3</sub>]CH<sub>3</sub>OO+C<sub>3</sub>H<sub>8</sub>=>CH<sub>3</sub>OOH+iR-->[iR]iROO+C<sub>3</sub>H<sub>8</sub>=>iROOH+iR--
29 > [iROOH]iROOH=>iRO+OH-->[iRO]
   [nR]O<sub>2</sub>QOOH<sub>1</sub>=>OH+OQ'OOH<sub>1</sub>-->[OQ'OOH<sub>1</sub>]OQ'OOH<sub>1</sub>=>OQ'O<sub>1</sub>+OH--
   >[OQ'O_1]OQ'O_1=>vinoxy+CH_2O-->[vinoxy]vinoxy+O_2=>CH_2O+CO+OH--
   >[CH<sub>2</sub>O]CH<sub>2</sub>O+formylperoxy=>HCO+formylooh--
30 > [formylooh] formylooh => formyloxy + OH--> [formyloxy]
31|[nR]O_2QOOH_1=>HO_2+prod_2->[prod_2]prod_2=>allyloxy+OH-->[allyloxy]
   [nR]O_2QOOH_1 => OH + OQ'OOH_1 --> [OQ'OOH_1]OQ'OOH_1 => OQ'O_1 + OH --
   >[OQ'O<sub>1</sub>]OQ'O<sub>1</sub>=>vinoxy+CH<sub>2</sub>O-->[CH<sub>2</sub>O]CH<sub>3</sub>OO+CH<sub>2</sub>O=>CH<sub>3</sub>OOH+HCO--
   >[HCO]HCO+O<sub>2</sub>=>formylperoxy--
   >[formylperoxy]C<sub>3</sub>H<sub>8</sub>+formylperoxy=>iR+formylooh--
32 > [formylooh] formylooh => formyloxy + OH--> [formyloxy]
33 [nR]nROO=>OH+propoxide-->[propoxide]
   [nR]nROO+C<sub>3</sub>H<sub>8</sub>=>nROOH+iR-->[nROOH]nROOH=>nRO+OH--
   >[nRO]nRO=>C_2H_5+CH_2O-->[C_2H_5]CH_3CH_2OO+C_3H_8=>CH_3CH_2OOH+nR--
   >[nR]O<sub>2</sub>QOOH<sub>1</sub>=>OH+OQ'OOH<sub>1</sub>-->[OQ'OOH<sub>1</sub>]OQ'OOH<sub>1</sub>=>OQ'O<sub>1</sub>+OH--
[nR]nROO+C_3H_8=>nROOH+iR-->[iR]iROO+C_3H_8=>iROOH+iR--
    >[iROOH]iROOH=>iRO+OH-->[iRO]iRO=>CH3+acetaldehyde--
35 > [CH_3]CH_3OO + HO_2 = > CH_3OOH + O_2 - > [CH_3OOH]CH_3OOH = > CH_3O + OH - - > [CH_3O]
   [nR]nROO+C3H8=>nROOH+iR-->[nROOH]nROOH=>nRO+OH--
   >[nRO]nRO=>C_2H_5+CH_2O-->[CH_2O]iROO+CH_2O=>iROOH+HCO--
36 >[iROOH]iROOH=>iRO+OH-->[iRO]
    [nR]nROO=>QOOH_2-->[QOOH_2]well_2=>well_3-->[well_3]well_3=>OH+prod_4--
37 > [prod 4]
    [nR]nROO=>QOOH 2-->[QOOH 2]well 2=>well 3-->[well 3]well 3=>OH+prod 4--
38 > [prod_4] prod_4 = > frag_4 + OH--> [frag_4]
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[nR]O_2QOOH_1 => OH + OQ'OOH_1 -> [OQ'OOH_1]OQ'OOH_1 => OQ'O_1 + OH --
    >[OQ'O_1]OQ'O_1=>vinoxy+CH_2O-->[CH_2O]iROO+CH_2O=>iROOH+HCO--
    >[HCO]HCO+O<sub>2</sub>=>formylperoxy--
    >[formylperoxy]C<sub>3</sub>H<sub>8</sub>+formylperoxy=>iR+formylooh--
39 > [formylooh] formylooh => formyloxy + OH --> [formyloxy]
    [nR]O_2QOOH_1 => OH + OQ'OOH_1 -> [OQ'OOH_1]OQ'OOH_1 => OQ'O_1 + OH --
    >[OQ'O_1]OQ'O_1=>vinoxy+CH_2O-->[CH_2O]CH_2O+OH=>HCO+H_2O--
    >[HCO]HCO+O<sub>2</sub>=>formylperoxy--
    >[formylperoxy]C<sub>3</sub>H<sub>8</sub>+formylperoxy=>iR+formylooh--
40 > [formylooh] formylooh => formyloxy + OH--> [formyloxy]
    [nR]nROO+C<sub>3</sub>H<sub>8</sub>=>nROOH+nR-->[nROOH]nROOH=>nRO+OH--
    >[nRO]nRO=>C_2H_5+CH_2O-->[C_2H_5]CH_3CH_2OO+C_3H_8=>CH_3CH_2OOH+nR--
41 > [nR]O_2QOOH_1 = > OH + OQ'OOH_1 --> [OQ'OOH_1]
    [nR]nROO+C<sub>3</sub>H<sub>8</sub>=>nROOH+nR-->[nROOH]nROOH=>nRO+OH--
    >[nRO]nRO=>C_2H_5+CH_2O-->[C_2H_5]CH_3CH_2OO+C_3H_8=>CH_3CH_2OOH+nR--
42 > [nR]O_2QOOH_1 = > OH + OQ'OOH_1 - > [OQ'OOH_1]OQ'OOH_1 = > OQ'O_1 + OH - > [OQ'O_1]
    [nR]nROO+C<sub>3</sub>H<sub>8</sub>=>nROOH+iR-->[nROOH]nROOH=>nRO+OH--
    >[nRO]nRO=>C<sub>2</sub>H<sub>5</sub>+CH<sub>2</sub>O-->[C<sub>2</sub>H<sub>5</sub>]CH<sub>3</sub>CH<sub>2</sub>OO+C<sub>3</sub>H<sub>8</sub>=>CH<sub>3</sub>CH<sub>2</sub>OOH+nR--
43 > [CH<sub>3</sub>CH<sub>2</sub>OOH]CH<sub>3</sub>CH<sub>2</sub>OOH=>ethoxy+OH-->[ethoxy]
    [nR]O_2QOOH_1=>OH+OQ'OOH_1->[OQ'OOH_1]OQ'OOH_1=>OQ'O_1+OH--
    >[OQ'O_1]OQ'O_1=>vinoxy+CH_2O-->[CH_2O]iROO+CH_2O=>iROOH+HCO--
    >[iROOH]iROOH=>iRO+OH-->[iRO]iRO=>CH3+acetaldehyde--
44|>[CH<sub>3</sub>]CH<sub>3</sub>OO+HO<sub>2</sub>=>CH<sub>3</sub>OOH+O<sub>2</sub>-->[CH<sub>3</sub>OOH]CH<sub>3</sub>OOH=>CH<sub>3</sub>O+OH-->[CH<sub>3</sub>O]
    [nR]nROO+C3H8=>nROOH+iR-->[nROOH]nROOH=>nRO+OH--
    >[nRO]nRO=>C<sub>2</sub>H<sub>5</sub>+CH<sub>2</sub>O-->[C<sub>2</sub>H<sub>5</sub>]CH<sub>3</sub>CH<sub>2</sub>OO+HO<sub>2</sub>=>CH<sub>3</sub>CH<sub>2</sub>OOH+O<sub>2</sub>--
45 > [CH<sub>3</sub>CH<sub>2</sub>OOH]CH<sub>3</sub>CH<sub>2</sub>OOH=>ethoxy+OH-->[ethoxy]
    [nR]O_2QOOH_1 => OH + OQ'OOH_1 --> [OQ'OOH_1]OQ'OOH_1 => OQ'O_1 + OH --
    >[OQ'O_1]OQ'O_1=>vinoxy+CH_2O-->[vinoxy]vinoxy+O_2=>CH_2O+CO+OH--
    >[CH<sub>2</sub>O]CH<sub>3</sub>OO+CH<sub>2</sub>O=>CH<sub>3</sub>OOH+HCO-->[HCO]HCO+O<sub>2</sub>=>formylperoxy--
    >[formylperoxy]C<sub>3</sub>H<sub>8</sub>+formylperoxy=>iR+formylooh--
46 > [formylooh] formylooh => formyloxy + OH --> [formyloxy]
    [nR]nROO+C<sub>3</sub>H<sub>8</sub>=>nROOH+nR-->[nROOH]nROOH=>nRO+OH--
    >[nRO]nRO=>C_2H_5+CH_2O-->[C_2H_5]CH_3CH_2OO+C_3H_8=>CH_3CH_2OOH+nR--
    >[nR]O_2QOOH_1=>OH+OQ'OOH_1-->[OQ'OOH_1]OQ'OOH_1=>OQ'O_1+OH--
47|>[OQ'O_1]OQ'O_1=>vinoxy+CH_2O-->[vinoxy]vinoxy+O_2=>CH_2O+CO+OH-->[CO]
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[nR]nROO=>QOOH 2-->[QOOH 2]well 2=>well 3-->[well 3]well 3=>well 2--
48 > [well 2] well 2=> well 3--> [well 3] well 3=> OH+prod 4--> [prod 4]
    [nR]nROO=>QOOH 2-->[QOOH 2]well 2=>well 3-->[well 3]well 3=>well 2--
   >[well 2]well 2=>well 3-->[well 3]well 3=>OH+prod 4--
49 > [prod_4] prod_4 = > frag_4 + OH--> [frag_4]
   [nR]nROO+C<sub>3</sub>H<sub>8</sub>=>nROOH+iR-->[nROOH]nROOH=>nRO+OH--
   >[nRO]nRO=>C<sub>2</sub>H<sub>5</sub>+CH<sub>2</sub>O-->[CH<sub>2</sub>O]CH<sub>3</sub>OO+CH<sub>2</sub>O=>CH<sub>3</sub>OOH+HCO--
50 > [CH<sub>3</sub>OOH] CH<sub>3</sub>OOH=> CH<sub>3</sub>O+OH--> [CH<sub>3</sub>O]
   [nR]O_2QOOH_1 => OH + OQ'OOH_1 --> [OQ'OOH_1]OQ'OOH_1 => OQ'O_1 + OH --
   >[OQ'O_1]OQ'O_1=>vinoxy+CH_2O-->[CH_2O]CH_3CH_2OO+CH_2O=>CH_3CH_2OOH+HCO--
   >[HCO]HCO+O<sub>2</sub>=>formylperoxy--
   >[formylperoxy]C<sub>3</sub>H<sub>8</sub>+formylperoxy=>iR+formylooh--
51|>[formylooh]formylooh=>formyloxy+OH-->[formyloxy]
   [nR]nROO+C<sub>3</sub>H<sub>8</sub>=>nROOH+nR-->[nROOH]nROOH=>nRO+OH--
   >[nRO]nRO=>C_2H_5+CH_2O-->[CH_2O]iROO+CH_2O=>iROOH+HCO--
52 > [iROOH]iROOH=>iRO+OH-->[iRO]
   [nR]nROO+C3H8=>nROOH+iR-->[iR]iROO+C3H8=>iROOH+iR--
   >[iROOH]iROOH=>iRO+OH-->[iRO]iRO=>CH3+acetaldehyde--
53 > [CH_3]CH_3OO + C_3H_8 = > CH_3OOH + nR - > [nR]O_2QOOH_1 = > OH + OQ'OOH_1 - > [OQ'OOH_1]
   [nR]nROO+C_3H_8=>nROOH+iR-->[iR]iROO+C_3H_8=>iROOH+iR--
   >[iROOH]iROOH=>iRO+OH-->[iRO]iRO=>CH3+acetaldehyde--
   >[CH_3]CH_3OO+C_3H_8=>CH_3OOH+nR-->[nR]O_2QOOH_1=>OH+OQ'OOH_1--
54 > [OQ'OOH_1]OQ'OOH_1 = > OQ'O_1 + OH-->[OQ'O_1]
   [nR]nROO+C<sub>3</sub>H<sub>8</sub>=>nROOH+iR-->[nROOH]nROOH=>nRO+OH--
   >[nRO]nRO=>C_2H_5+CH_2O-->[C_2H_5]CH_3CH_2OO+C_3H_8=>CH_3CH_2OOH+iR--
55 > [iR]iROO + C_3H_8 = > iROOH + nR --> [iROOH]iROOH = > iRO + OH --> [iRO]
   [nR]nROO+C_3H_8=>nROOH+iR-->[iR]iROO+C_3H_8=>iROOH+iR--
   >[iROOH]iROOH=>iRO+OH-->[iRO]iRO=>CH3+acetaldehyde--
   >[CH<sub>3</sub>]CH<sub>3</sub>OO+C<sub>3</sub>H<sub>8</sub>=>CH<sub>3</sub>OOH+nR-->[nR]O<sub>2</sub>QOOH<sub>1</sub>=>OH+OQ'OOH<sub>1</sub>--
   >[OQ'OOH_1]OQ'OOH_1 => OQ'O_1 + OH-->[OQ'O_1]OQ'O_1 => vinoxy + CH_2O--
|S_0| > [vinoxy] vinoxy + O_2 = > CH_2O + CO + OH --> [CO]
   [nR]nROO+C<sub>3</sub>H<sub>8</sub>=>nROOH+iR-->[nROOH]nROOH=>nRO+OH--
   >[nRO]nRO=>C_2H_5+CH_2O-->[C_2H_5]CH_3CH_2OO+C_3H_8=>CH_3CH_2OOH+iR--
57 | >[iR]iROO+HO<sub>2</sub>=>iROOH+O<sub>2</sub>-->[iROOH]iROOH=>iRO+OH-->[iRO]
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[nR]nROO+C_3H_8=>nROOH+iR-->[iR]iROO+C_3H_8=>iROOH+iR--
    >[iROOH]iROOH=>iRO+OH-->[iRO]iRO=>CH3+acetaldehyde--
58 > [CH<sub>3</sub>]CH<sub>3</sub>OO+C<sub>3</sub>H<sub>8</sub>=>CH<sub>3</sub>OOH+nR--> [CH<sub>3</sub>OOH]CH<sub>3</sub>OOH=>CH<sub>3</sub>O+OH--> [CH<sub>3</sub>O]
    [nR]O_2QOOH_1 => OH + OQ'OOH_1 --> [OQ'OOH_1]OQ'OOH_1 => OQ'O_1 + OH --
    >[OQ'O<sub>1</sub>]OQ'O<sub>1</sub>=>vinoxy+CH<sub>2</sub>O-->[CH<sub>2</sub>O]CH<sub>3</sub>OO+CH<sub>2</sub>O=>CH<sub>3</sub>OOH+HCO--
    >[HCO]HCO+O<sub>2</sub>=>formylperoxy--
    >[formylperoxy]CH<sub>2</sub>O+formylperoxy=>HCO+formylooh--
59 > [formylooh] formylooh => formyloxy + OH--> [formyloxy]
    [nR]O<sub>2</sub>QOOH<sub>1</sub>=>OH+OQ'OOH<sub>1</sub>-->[OQ'OOH<sub>1</sub>]OQ'OOH<sub>1</sub>=>OQ'O<sub>1</sub>+OH--
    >[OQ'O_1]OQ'O_1=>vinoxy+CH_2O-->[vinoxy]vinoxy+O_2=>CH_2O+CO+OH--
    >[CH<sub>2</sub>O]iROO+CH<sub>2</sub>O=>iROOH+HCO-->[HCO]HCO+O<sub>2</sub>=>formylperoxy--
    >[formylperoxy]C<sub>3</sub>H<sub>8</sub>+formylperoxy=>iR+formylooh--
60 > [formylooh] formylooh => formyloxy + OH --> [formyloxy]
    [nR]nROO+C<sub>3</sub>H<sub>8</sub>=>nROOH+iR-->[nROOH]nROOH=>nRO+OH--
    >[nRO]nRO=>C_2H_5+CH_2O-->[CH_2O]nROO+CH_2O=>nROOH+HCO--
61 > [nROOH] nROOH => nRO+OH--> [nRO]
    [nR]O<sub>2</sub>QOOH<sub>1</sub>=>OH+OQ'OOH<sub>1</sub>-->[OQ'OOH<sub>1</sub>]OQ'OOH<sub>1</sub>=>OQ'O<sub>1</sub>+OH--
    >[OQ'O_1]OQ'O_1=>vinoxy+CH_2O-->[vinoxy]vinoxy+O_2=>CH_2O+CO+OH--
    >[CH<sub>2</sub>O]CH<sub>2</sub>O+OH=>HCO+H<sub>2</sub>O-->[HCO]HCO+O<sub>2</sub>=>formylperoxy--
    >[formylperoxy]C<sub>3</sub>H<sub>8</sub>+formylperoxy=>iR+formylooh--
62 > [formylooh] formylooh => formyloxy + OH --> [formyloxy]
    [nR]nROO+C<sub>3</sub>H<sub>8</sub>=>nROOH+nR-->[nROOH]nROOH=>nRO+OH--
    >[nRO]nRO=>C_2H_5+CH_2O-->[C_2H_5]CH_3CH_2OO+C_3H_8=>CH_3CH_2OOH+nR--
63 >[CH<sub>2</sub>CH<sub>2</sub>OOH]CH<sub>2</sub>CH<sub>2</sub>OOH=>ethoxy+OH-->[ethoxy]
    [nR]nROO+C<sub>3</sub>H<sub>8</sub>=>nROOH+iR-->[nROOH]nROOH=>nRO+OH--
    >[nRO]nRO=>C_2H_5+CH_2O-->[C_2H_5]CH_3CH_2OO+C_3H_8=>CH_3CH_2OOH+iR--
64 > [iR]iROO + C_3H_8 = > iROOH + nR --> [nR]O_2QOOH_1 = > OH + OQ'OOH_1 --> [OQ'OOH_1]
    [nR]nROO+C<sub>3</sub>H<sub>8</sub>=>nROOH+iR-->[nROOH]nROOH=>nRO+OH--
    >[nRO]nRO=>C_2H_5+CH_2O-->[C_2H_5]CH_3CH_2OO+C_3H_8=>CH_3CH_2OOH+iR--
    >[iR]iROO+C_3H_8=>iROOH+nR-->[nR]O_2QOOH_1=>OH+OQ'OOH_1--
65 > [OQ'OOH_1]OQ'OOH_1 = > OQ'O_1 + OH-->[OQ'O_1]
    [nR]O_2QOOH_1 => OH + OQ'OOH_1 --> [OQ'OOH_1]OQ'OOH_1 => OQ'O_1 + OH --
    >[OQ'O_1]OQ'O_1=>vinoxy+CH_2O-->[vinoxy]vinoxy+O_2=>CH_2O+CO+OH--
    >[CH<sub>2</sub>O]iROO+CH<sub>2</sub>O=>iROOH+HCO-->[iROOH]iROOH=>iRO+OH--
    >[iRO]iRO=>CH<sub>3</sub>+acetaldehyde-->[CH<sub>3</sub>]CH<sub>3</sub>OO+HO<sub>2</sub>=>CH<sub>3</sub>OOH+O<sub>2</sub>--
66 > [CH<sub>2</sub>OOH]CH<sub>2</sub>OOH=>CH<sub>2</sub>O+OH-->[CH<sub>2</sub>O]
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[nR]O_2QOOH_1 => OH + OQ'OOH_1 -> [OQ'OOH_1]OQ'OOH_1 => OQ'O_1 + OH --
   >[OQ'O_1]OQ'O_1=>vinoxy+CH_2O-->[CH_2O]CH_2O+HO_2=>HCO+H_2O_2--
   >[HCO]HCO+O<sub>2</sub>=>formylperoxy--
    >[formylperoxy]C<sub>3</sub>H<sub>8</sub>+formylperoxy=>iR+formylooh--
67 > [formylooh] formylooh => formyloxy + OH --> [formyloxy]
    [nR]nROO+C<sub>3</sub>H<sub>8</sub>=>nROOH+nR-->[nROOH]nROOH=>nRO+OH--
   >[nRO]nRO=>C_2H_5+CH_2O-->[C_2H_5]CH_3CH_2OO+HO_2=>CH_3CH_2OOH+O_2--
68 > [CH<sub>3</sub>CH<sub>2</sub>OOH]CH<sub>3</sub>CH<sub>2</sub>OOH=>ethoxy+OH-->[ethoxy]
   [nR]nROO=>QOOH_2-->[QOOH_2]well_2=>well_3-->[well_3]well_3=>well_2--
   >[well 2]well 2=>well 3-->[well 3]well 3=>well 2-->[well 2]well 2=>well 3--
69 > [well_3] well_3 => OH + prod_4 --> [prod_4]
    [nR]nROO=>QOOH 2-->[QOOH 2]well 2=>well 3-->[well 3]well 3=>well 2--
    >[well_2]well_2=>well_3-->[well_3]well_3=>well_2-->[well_2]well_2=>well_3--
70|>[well_3]well_3=>OH+prod_4-->[prod_4]prod_4=>frag_4+OH-->[frag_4]
   [nR]nROO+C<sub>3</sub>H<sub>8</sub>=>nROOH+iR-->[iR]iROO+C<sub>3</sub>H<sub>8</sub>=>iROOH+iR--
   >[iROOH]iROOH=>iRO+OH-->[iRO]iRO=>CH3+acetaldehyde--
   >[acetaldehyde]CH<sub>3</sub>OO+acetaldehyde=>CH<sub>3</sub>OOH+acetyl--
71 > [CH<sub>3</sub>OOH] CH<sub>3</sub>OOH=> CH<sub>3</sub>O+OH--> [CH<sub>3</sub>O]
   [nR]O_2QOOH_1 => OH + OQ'OOH_1 --> [OQ'OOH_1]OQ'OOH_1 => OQ'O_1 + OH --
   >[OQ'O_1]OQ'O_1=>vinoxy+CH_2O-->[CH_2O]CH_2O+OH=>HCO+H_2O--
   >[HCO]HCO+O<sub>2</sub>=>formylperoxy--
   >[formylperoxy]CH<sub>2</sub>O+formylperoxy=>HCO+formylooh--
72 > [formylooh] formylooh => formyloxy + OH--> [formyloxy]
    [nR]nROO+C<sub>3</sub>H<sub>8</sub>=>nROOH+nR-->[nROOH]nROOH=>nRO+OH--
   >[nRO]nRO=>C<sub>2</sub>H<sub>5</sub>+CH<sub>2</sub>O-->[CH<sub>2</sub>O]CH<sub>3</sub>OO+CH<sub>2</sub>O=>CH<sub>3</sub>OOH+HCO--
73 > [CH<sub>3</sub>OOH]CH<sub>3</sub>OOH=>CH<sub>3</sub>O+OH-->[CH<sub>3</sub>O]
   [nR]O_2QOOH_1 => OH + OQ'OOH_1 --> [OQ'OOH_1]OQ'OOH_1 => OQ'O_1 + OH --
   >[OQ'O_1]OQ'O_1=>vinoxy+CH_2O-->[vinoxy]vinoxy+O_2=>CH_2O+CO+OH--
   >[CH<sub>2</sub>O]CH<sub>3</sub>CH<sub>2</sub>OO+CH<sub>2</sub>O=>CH<sub>3</sub>CH<sub>2</sub>OOH+HCO-->[HCO]HCO+O<sub>2</sub>=>formylperoxy--
   >[formylperoxy]C<sub>3</sub>H<sub>8</sub>+formylperoxy=>iR+formylooh--
74 > [formylooh] formylooh => formyloxy + OH --> [formyloxy]
   [nR]nROO+C<sub>3</sub>H<sub>8</sub>=>nROOH+iR-->[nROOH]nROOH=>nRO+OH--
   >[nRO]nRO=>C_2H_5+CH_2O-->[C_2H_5]CH_3CH_2OO+C_3H_8=>CH_3CH_2OOH+iR--
   [iR]iROO+C_3H_8=>iROOH+nR-->[nR]O_2QOOH_1=>OH+OQ'OOH_1--
   >[OQ'OOH_1]OQ'OOH_1=>OQ'O_1+OH-->[OQ'O_1]OQ'O_1=>vinoxy+CH_2O--
75 > [vinoxy] vinoxy + O<sub>2</sub> = > CH<sub>2</sub>O + CO + OH - - > [CO]
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[nR]nROO+C_3H_8=>nROOH+iR-->[iR]iROO+C_3H_8=>iROOH+iR--
   >[iROOH]iROOH=>iRO+OH-->[iRO]iRO=>CH3+acetaldehyde--
   >[acetaldehyde]acetaldehyde+acetylperoxy=>acetyl+CH<sub>3</sub>CO<sub>3</sub>H--
76 > [CH<sub>3</sub>CO<sub>3</sub>H]CH<sub>3</sub>CO<sub>3</sub>H=>acetyloxy+OH-->[acetyloxy]
77[nR]O_2QOOH_1 => OH+prod 3-->[prod 3]
78 [nR]O<sub>2</sub>QOOH<sub>1</sub>=>OH+prod 3-->[prod 3]prod 3=>frag 3+OH-->[frag 3]
   [nR]O_2QOOH_1 => OH + OQ'OOH_1 --> [OQ'OOH_1]OQ'OOH_1 => OQ'O_1 + OH --
   >[OQ'O<sub>1</sub>]OQ'O<sub>1</sub>=>vinoxy+CH<sub>2</sub>O-->[CH<sub>2</sub>O]CH<sub>3</sub>OO+CH<sub>2</sub>O=>CH<sub>3</sub>OOH+HCO--
   >[HCO]HCO+O<sub>2</sub>=>formylperoxy--
   >[formylperoxy]C<sub>3</sub>H<sub>8</sub>+formylperoxy=>nR+formylooh--
79 > [formylooh] formylooh => formyloxy + OH --> [formyloxy]
    [nR]nROO=>QOOH_2-->[QOOH_2]well_2=>well_3-->[well_3]well_3=>well_5--
80 > [well_5] well_5 => OH + prod_3 --> [prod_3]
   [nR]nROO=>QOOH 2-->[QOOH 2]well 2=>well 3-->[well 3]well 3=>well 5--
81 >[well_5]well_5=>OH+prod_3-->[prod_3]prod_3=>frag_3+OH-->[frag_3]
   [nR]nROO+C<sub>3</sub>H<sub>8</sub>=>nROOH+iR-->[iR]iROO+C<sub>3</sub>H<sub>8</sub>=>iROOH+nR--
   >[iROOH]iROOH=>iRO+OH-->[iRO]iRO=>CH3+acetaldehyde--
82 > [CH_3]CH_3OO + C_3H_8 = > CH_3OOH + iR --> [CH_3OOH]CH_3OOH = > CH_3O + OH --> [CH_3O]
    [nR]nROO+C_3H_8=>nROOH+iR-->[iR]iROO+C_3H_8=>iROOH+iR--
   >[iROOH]iROOH=>iRO+OH-->[iRO]iRO=>CH3+acetaldehyde--
   >[acetaldehyde]iROO+acetaldehyde=>iROOH+acetyl-->[iROOH]iROOH=>iRO+OH--
83 >[iRO]
    [nR]O_2QOOH_1 => OH + OQ'OOH_1 -> [OQ'OOH_1]OQ'OOH_1 => OQ'O_1 + OH --
   >[OQ'O_1]OQ'O_1=>vinoxy+CH_2O-->[CH_2O]iROO+CH_2O=>iROOH+HCO--
   >[HCO]HCO+O<sub>2</sub>=>formylperoxy--
   >[formylperoxy]CH<sub>2</sub>O+formylperoxy=>HCO+formylooh--
84 > [formylooh] formylooh => formyloxy + OH --> [formyloxy]
   [nR]nROO+C<sub>3</sub>H<sub>8</sub>=>nROOH+nR-->[nROOH]nROOH=>nRO+OH--
    >[nRO]nRO=>C_2H_5+CH_2O-->[C_2H_5]CH_3CH_2OO+C_3H_8=>CH_3CH_2OOH+iR--
85 > [iR]iROO + C_3H_8 = > iROOH + nR --> [iROOH]iROOH = > iRO + OH --> [iRO]
   [nR]O<sub>2</sub>QOOH<sub>1</sub>=>OH+OQ'OOH<sub>1</sub>-->[OQ'OOH<sub>1</sub>]OQ'OOH<sub>1</sub>=>OQ'O<sub>1</sub>+OH--
   >[OQ'O_1]OQ'O_1=>vinoxy+CH_2O-->[CH_2O]nROO+CH_2O=>nROOH+HCO--
   >[HCO]HCO+O<sub>2</sub>=>formylperoxy--
   >[formylperoxy]C<sub>3</sub>H<sub>8</sub>+formylperoxy=>iR+formylooh--
86 > [formylooh] formylooh => formyloxy + OH--> [formyloxy]
    [nR]nROO+C<sub>3</sub>H<sub>8</sub>=>nROOH+iR-->[nROOH]nROOH=>nRO+OH--
   >[nRO]nRO=>C<sub>2</sub>H<sub>5</sub>+CH<sub>2</sub>O-->[CH<sub>2</sub>O]CH<sub>2</sub>O+acetylperoxy=>HCO+CH<sub>3</sub>CO<sub>3</sub>H--
87 | >[CH<sub>3</sub>CO<sub>3</sub>H]CH<sub>3</sub>CO<sub>3</sub>H=>acetyloxy+OH-->[acetyloxy]
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[nR]O<sub>2</sub>QOOH<sub>1</sub>=>OH+OQ'OOH<sub>1</sub>-->[OQ'OOH<sub>1</sub>]OQ'OOH<sub>1</sub>=>OQ'O<sub>1</sub>+OH--
   >[OQ'O_1]OQ'O_1=>vinoxy+CH_2O-->[CH_2O]CH_3CH_2OO+CH_2O=>CH_3CH_2OOH+HCO--
   >[HCO]HCO+O<sub>2</sub>=>formylperoxy--
   >[formylperoxy]CH<sub>2</sub>O+formylperoxy=>HCO+formylooh--
88 > [formylooh] formylooh => formyloxy + OH --> [formyloxy]
   [nR]nROO+C<sub>3</sub>H<sub>8</sub>=>nROOH+nR-->[nROOH]nROOH=>nRO+OH--
   >[nRO]nRO=>C_2H_5+CH_2O-->[C_2H_5]CH_3CH_2OO+C_3H_8=>CH_3CH_2OOH+iR--
89 | >[iR]iROO+HO<sub>2</sub>=>iROOH+O<sub>2</sub>-->[iROOH]iROOH=>iRO+OH-->[iRO]
90 [nR]nROO=>QOOH 2-->[QOOH 2]well 2=>OH+prod 5-->[prod 5]
   [nR]nROO=>QOOH 2-->[QOOH 2]well 2=>OH+prod 5--
91 > [prod_5] prod_5 = > frag_5 + OH--> [frag_5]
   [nR]O_2QOOH_1 => OH + OQ'OOH_1 --> [OQ'OOH_1]OQ'OOH_1 => OQ'O_1 + OH --
   >[OQ'O_1]OQ'O_1=>vinoxy+CH_2O-->[vinoxy]vinoxy+O_2=>CH_2O+CO+OH--
   >[CH<sub>2</sub>O]CH<sub>3</sub>OO+CH<sub>2</sub>O=>CH<sub>3</sub>OOH+HCO-->[HCO]HCO+O<sub>2</sub>=>formylperoxy--
   >[formylperoxy]CH<sub>2</sub>O+formylperoxy=>HCO+formylooh--
92 > [formylooh] formylooh => formyloxy + OH --> [formyloxy]
   [nR]nROO+C<sub>3</sub>H<sub>8</sub>=>nROOH+iR-->[nROOH]nROOH=>nRO+OH--
   >[nRO]nRO=>C_2H_5+CH_2O-->[C_2H_5]CH_3CH_2OO+C_3H_8=>CH_3CH_2OOH+iR--
   >[iR]iROO+C<sub>3</sub>H<sub>8</sub>=>iROOH+iR-->[iROOH]iROOH=>iRO+OH--
   >[iRO]iRO=>CH<sub>3</sub>+acetaldehyde-->[CH<sub>3</sub>]CH<sub>3</sub>OO+HO<sub>2</sub>=>CH<sub>3</sub>OOH+O<sub>2</sub>--
93 > [CH<sub>3</sub>OOH] CH<sub>3</sub>OOH=> CH<sub>3</sub>O+OH--> [CH<sub>3</sub>O]
   [nR]nROO+C_3H_8=>nROOH+iR-->[iR]iROO+C_3H_8=>iROOH+iR--
   >[iROOH]iROOH=>iRO+OH-->[iRO]iRO=>CH3+acetaldehyde--
   >[acetaldehyde]CH<sub>3</sub>OO+acetaldehyde=>CH<sub>3</sub>OOH+acetyl--
   >[acetyl]acetylperoxy+HO<sub>2</sub>=>CH<sub>3</sub>CO<sub>3</sub>H+O<sub>2</sub>-->[CH<sub>3</sub>CO<sub>3</sub>H]CH<sub>3</sub>CO<sub>3</sub>H=>acetyloxy+OH--
94 >[acetyloxy]
   [nR]nROO+C<sub>3</sub>H<sub>8</sub>=>nROOH+nR-->[nROOH]nROOH=>nRO+OH--
   >[nRO]nRO=>C_2H_5+CH_2O-->[CH_2O]nROO+CH_2O=>nROOH+HCO--
95 > [nROOH] nROOH => nRO+OH--> [nRO]
   [nR]nROO=>QOOH_2-->[QOOH_2]well_2=>well_3-->[well_3]well_3=>well_2--
   >[well 2]well 2=>well 3-->[well 3]well 3=>well 2-->[well 2]well 2=>well 3--
   >[well_3]well_3=>well_2-->[well_2]well_2=>well_3-->[well_3]well_3=>OH+prod_4-
96 >[prod_4]
   [nR]nROO=>QOOH_2-->[QOOH_2]well_2=>well 3-->[well 3]well 3=>well 2--
   >[well_2]well_2=>well_3-->[well_3]well_3=>well_2-->[well_2]well_2=>well_3--
   >[well 3]well 3=>well 2-->[well 2]well 2=>well 3-->[well 3]well 3=>OH+prod 4-
97 >[prod_4]prod_4=>frag_4+OH-->[frag_4]
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[nR]nROO+C_3H_8=>nROOH+nR-->[nROOH]nROOH=>nRO+OH--\\ >[nRO]nRO=>C_2H_5+CH_2O-->[C_2H_5]CH_3CH_2OO+C_3H_8=>CH_3CH_2OOH+iR--\\ 98>[iR]iROO+C_3H_8=>iROOH+nR-->[nR]O_2QOOH_1=>OH+OQ'OOH_1-->[OQ'OOH_1]\\ [nR]nROO+C_3H_8=>nROOH+nR-->[nROOH]nROOH=>nRO+OH--\\ >[nRO]nRO=>C_2H_5+CH_2O-->[C_2H_5]CH_3CH_2OO+C_3H_8=>CH_3CH_2OOH+iR--\\ >[iR]iROO+C_3H_8=>iROOH+nR-->[nR]O_2QOOH_1=>OH+OQ'OOH_1--\\ 99>[OQ'OOH_1]OQ'OOH_1=>OQ'O_1+OH-->[OQ'O_1]\\ [nR]nROO+C_3H_8=>nROOH+iR-->[iR]iROO+C_3H_8=>iROOH+nR--\\ >[iROOH]iROOH=>iRO+OH-->[iRO]iRO=>CH_3+acetaldehyde--\\ >[CH_3]CH_3OO+C_3H_8=>CH_3OOH+iR-->[iR]iROO+C_3H_8=>iROOH+iR--\\ >[iROOH]iROOH=>iRO+OH-->[iRO]iROO+C_3H_8=>iROOH+iR--\\ >[iROOH]iROOH=>iRO+OH-->[iRO]
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