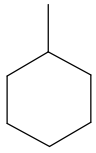
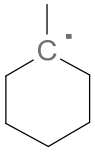
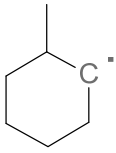
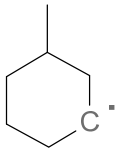
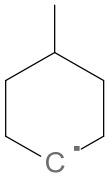
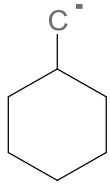
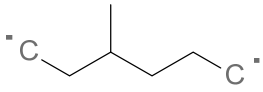
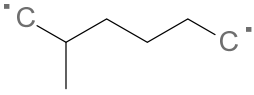
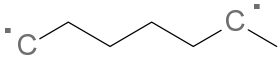
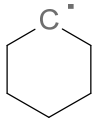
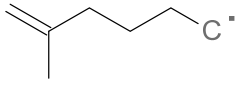
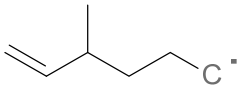
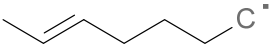
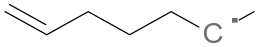
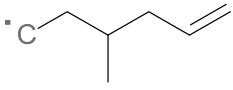
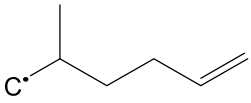
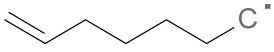
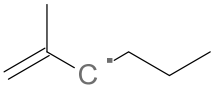
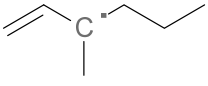
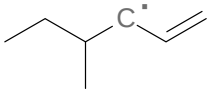
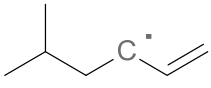
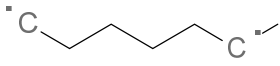
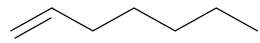
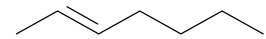
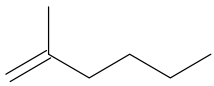
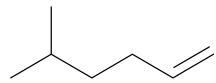
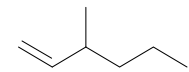
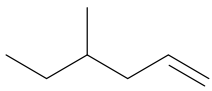
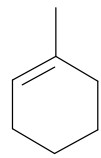
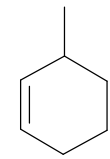
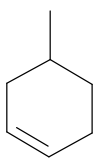
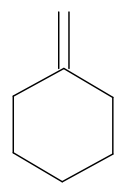
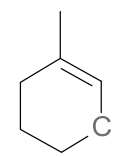
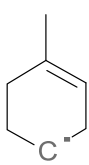
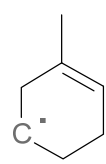
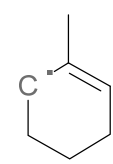
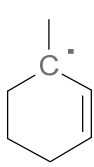
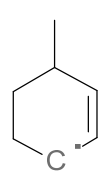
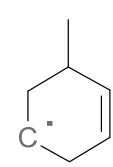
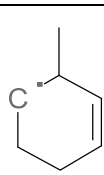
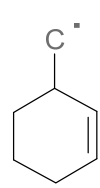
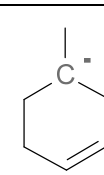
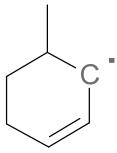
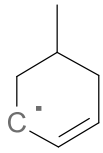
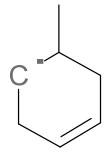
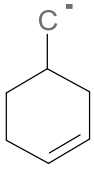
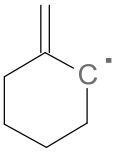
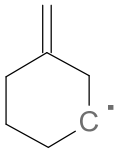
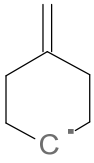
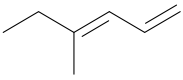
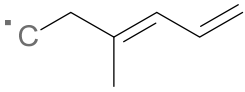
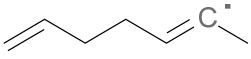
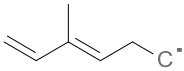
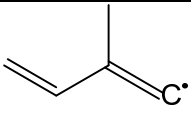
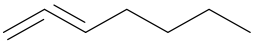
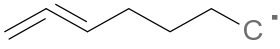
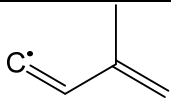
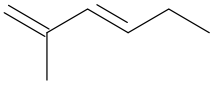
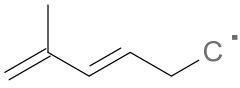
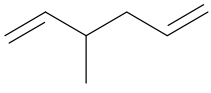
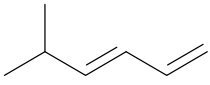
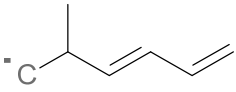
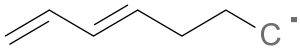
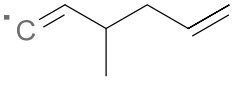
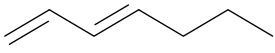
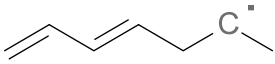
MCH species dictionary

 mch	 mchr1	 mchr2
 mchr3	 mchr4	 cychexch2
 c7h14gl	 c7h14af	 c7h1416
 chxrad	 ac7h13f	 gc7h13l
 c7h132-7	 c7h131-6	 kc7h13g
 ec7h13a	 c7h131-7	 ac7h13c
 gc7h13i	 kc7h13j	 ec7h13d

 c7h1416	 c7h14-1	 c7h14-2
 ac7h14	 ec7h14	 gc7h14
 kc7h14	 mch1ene	 mch2ene
 mch3ene	 chxdch2	 mch1n3j
 mch1n4j	 mch1n5j	 mch1n6j
 mch2n1j	 mch2n4j	 mch2n5j
 mch2n6j	 mch2nch2j	 mch3n1j

 mch3n2j	 mch3n5j	 mch3n6j
 mch3nch2j	 chxdch22j	 chxdch23j
 chxdch24j	 ikc7h12	 ikc7h11g
 x15c7h116	 gic7h11l	 c5h7-1
 x12c7h12	 x12c7h117	 c5h7-4
 acc7h12	 acc7h11f	 gkc7h12
 cec7h12	 cec7h11a	 x13c7h117
 gkc7h11g	 x13c7h12	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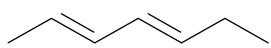
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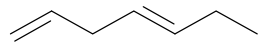
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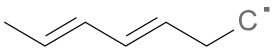
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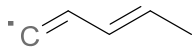
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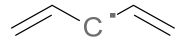
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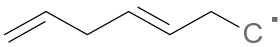
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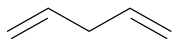
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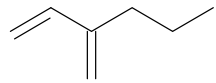
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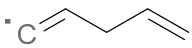
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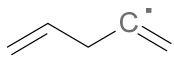
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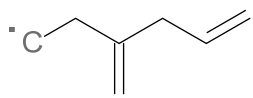
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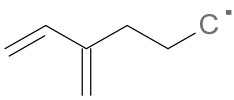
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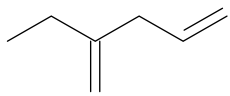
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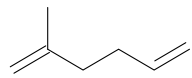
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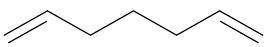
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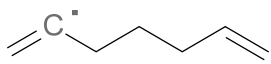
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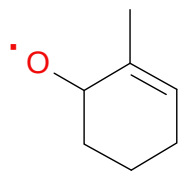
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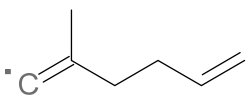
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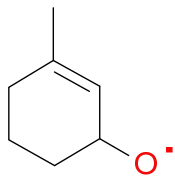
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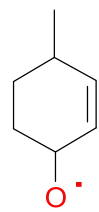
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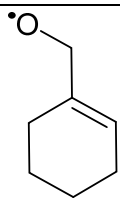
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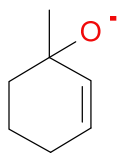
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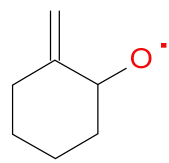
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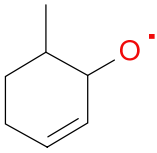
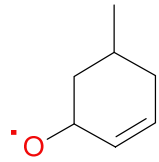
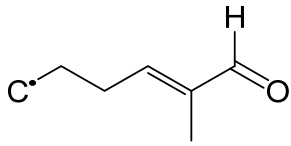
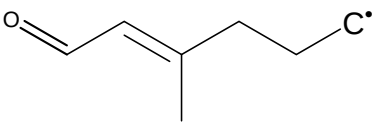
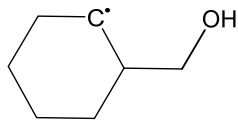
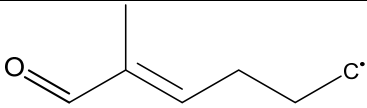
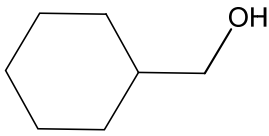
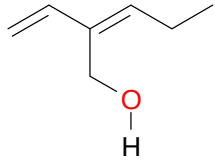
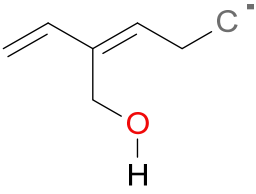
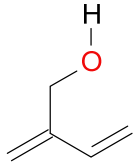
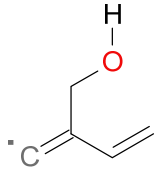
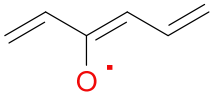
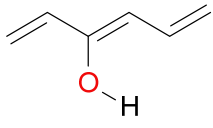
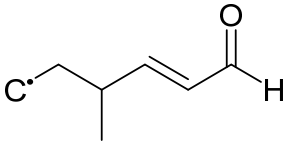
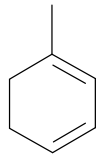
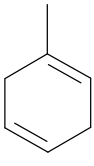
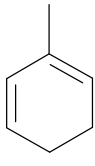
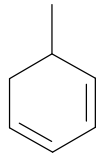
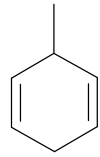
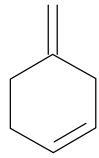
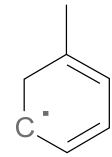
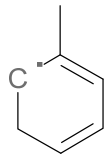
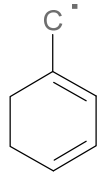
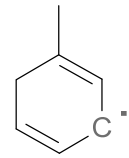
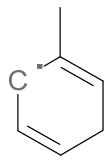
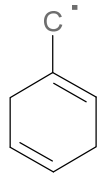
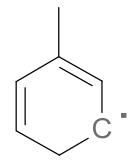
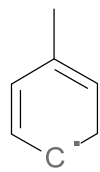
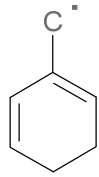
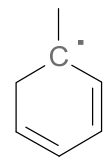
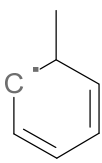
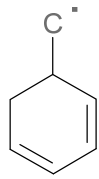
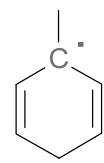
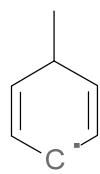
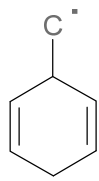
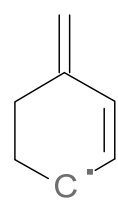
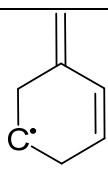
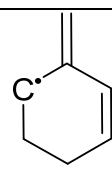
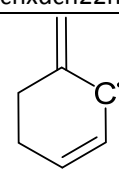
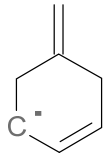
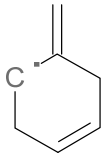
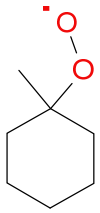
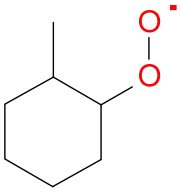
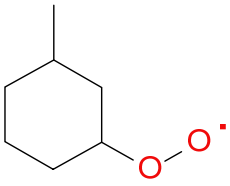
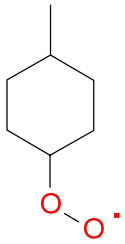
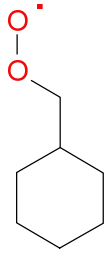
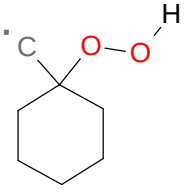
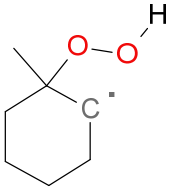
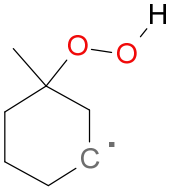
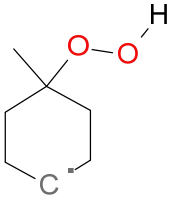
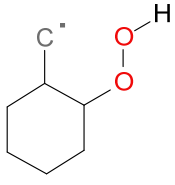
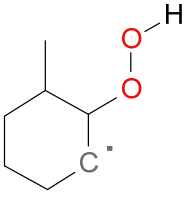
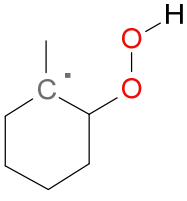
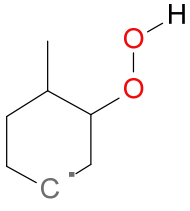
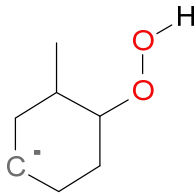
 mch3n2oj	 mch3n5oj	 bc6h11cho-a
 hc6h11cho-gl		 mch1ch2oh6j
 bc6h10cho-af	 mch1ch2oh	 hx13n3ch2oh
 hx13n3ch2oh6j	 bt13n2ch2oh	 bt13n2ch2oh1j
 x135c6h73oj	 x135c6h73oh	
 jc6h10cho-lg		 mch13dien
 mch14dien	 mch15dien	 mch24dien

 mch25dien	 chxdch23n	 mch13n5j
 mch13n6j	 mch13nch2j	 mch14n3j
 mch14n6j	 mch14nch2j	 mch15n3j
 mch15n4j	 mch15nch2j	 mch24n1j
 mch24n6j	 mch24nch2j	 mch25n1j
 mch25n4j	 mch25nch2j	 chxdch22n4j
 chxdch22n5j	 chxdch22n6j	 chxdch23n2j

 chxdch23n5j	 chxdch23n6j	 mch1oo
 mch2oo	 mch3oo	 mch4oo
 chxch2oo	 mch1qx	 mch1qj2
 mch1qj3	 mch1qj4	 mch1qx
 mch2qj3	 mch2qj1	 mch2qj4



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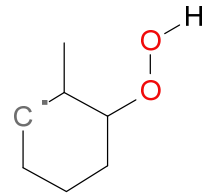

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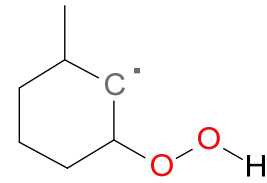

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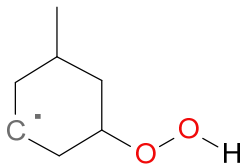

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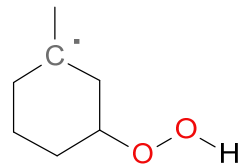

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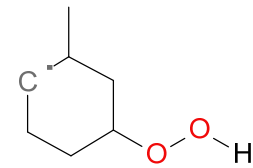

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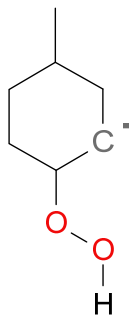

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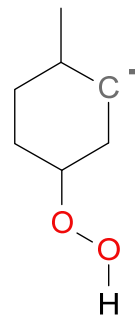

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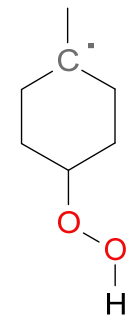

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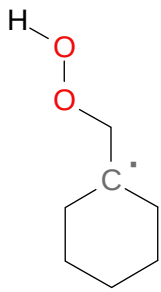

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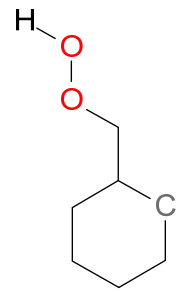

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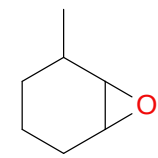
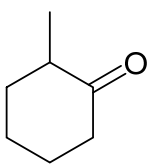
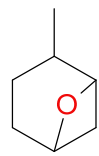


mchyo23



mcho (lumped species from mch1o, mch2o, mch3o)



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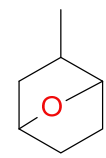

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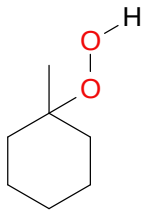

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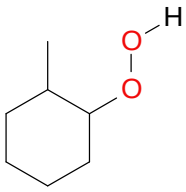

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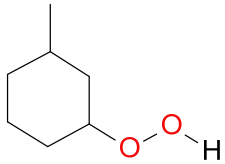

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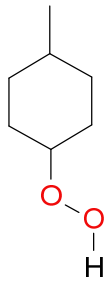

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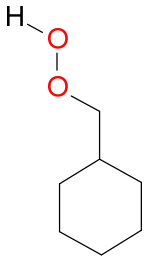

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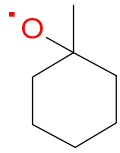

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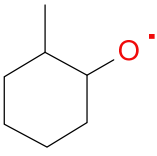

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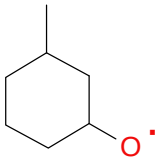

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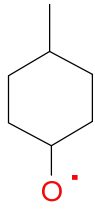

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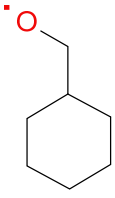

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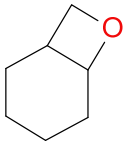

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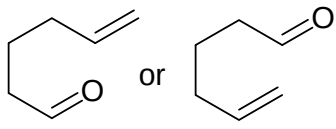
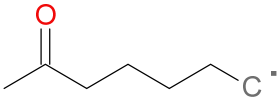


c6h11cho1
(lumped species)



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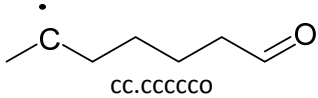

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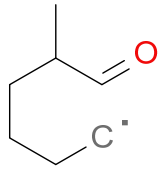

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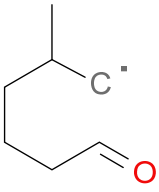

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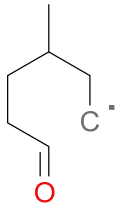

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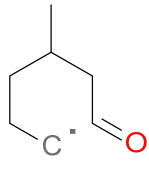

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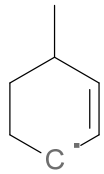
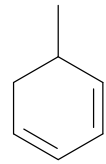


mchje



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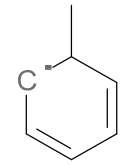

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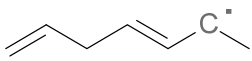

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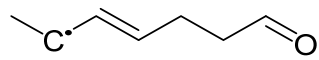

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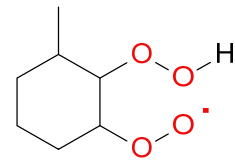

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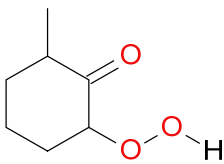

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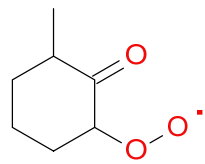

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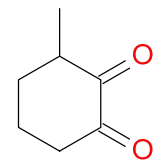

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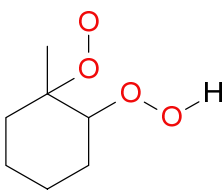

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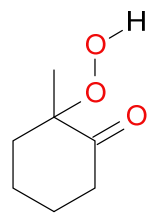

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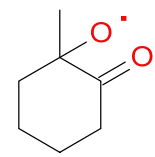

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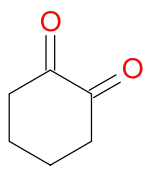

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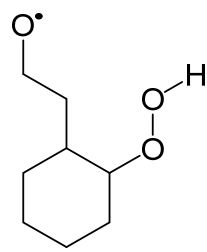

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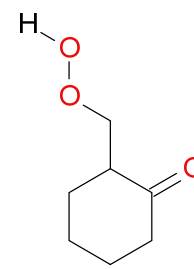

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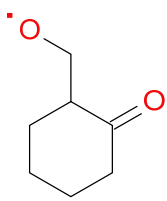

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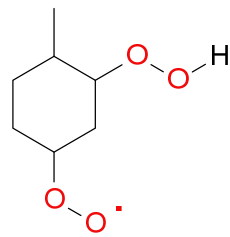

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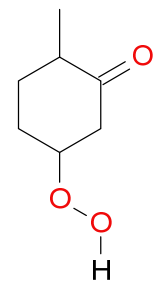

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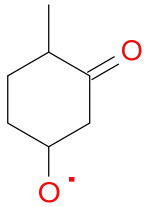
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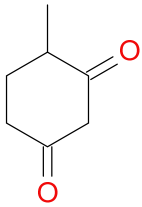
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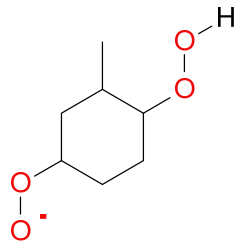
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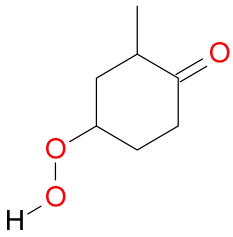
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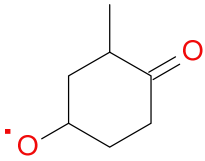
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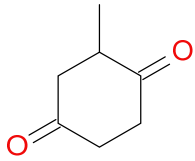
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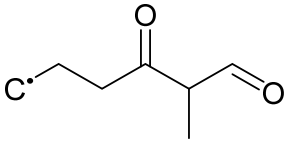
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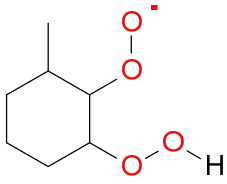
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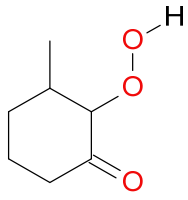
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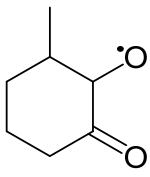
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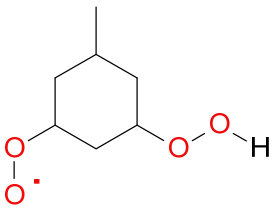
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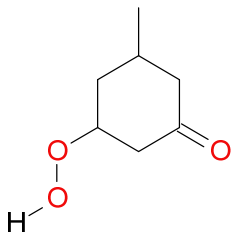
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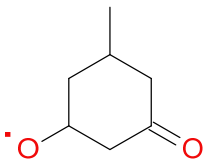
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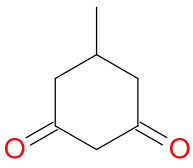
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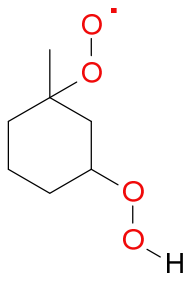
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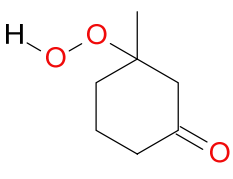
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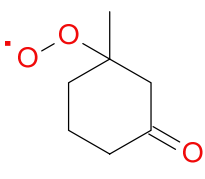
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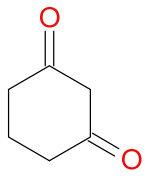
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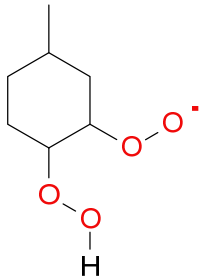

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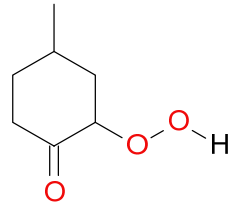

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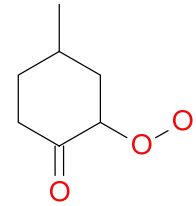

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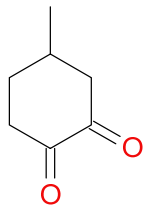

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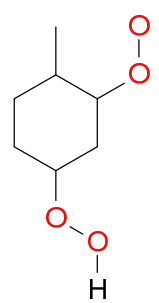

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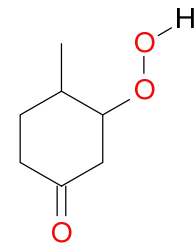

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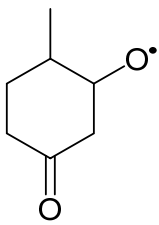

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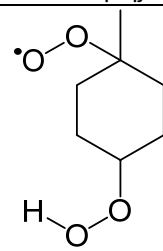

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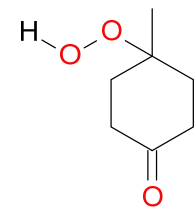

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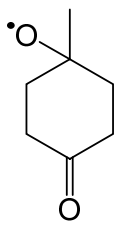

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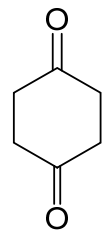

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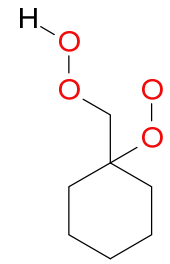

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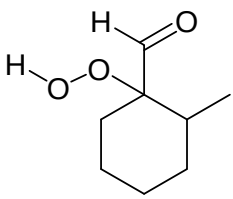

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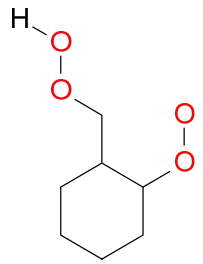

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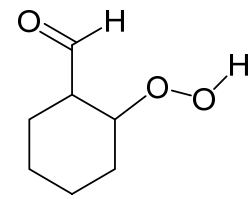

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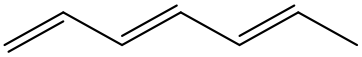
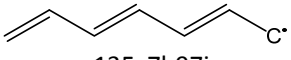
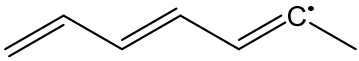
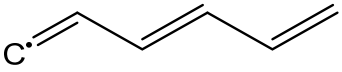
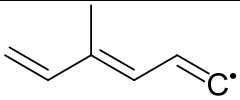
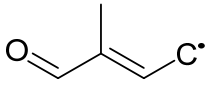
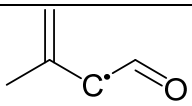
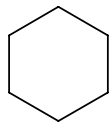
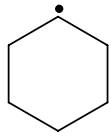
 x135c7h10	 x135c7h97j	 x135c7h96j
 linc6h7	 gikC7H9-l	 c4h6cho1-43
 ic3h5chcho		

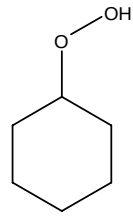
Species Glossary of Species Important at Low Temperature for CHX (Cyclohexane)



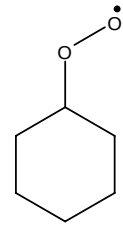
chx



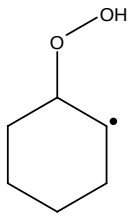
chxrad



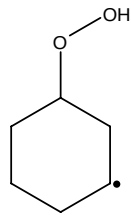
chxo2h



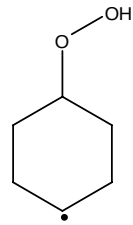
chxo2j



chx1q2j



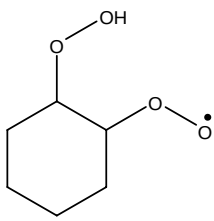
chx1q3j



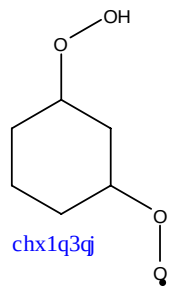
chx1q4j

where Q = -OOH
J = radical site

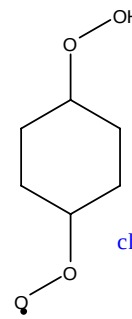
Colour highlights major species according to the Low Temperature Rxn Scheme
RH & R·
$RO\cdot_2$
·QOOH
$\cdot O_2QOOH$
Keto



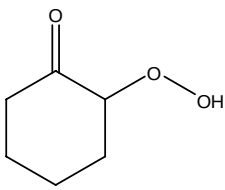
chx1q2qj



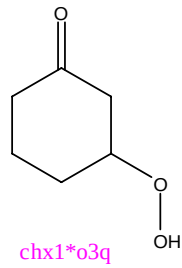
chx1q3qj



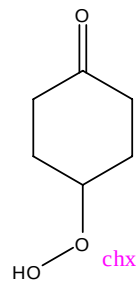
chx1q4qj



chx1*o2q



chx1*o3q

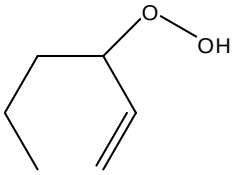


chx1*o4q

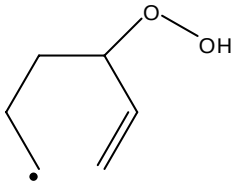
Naming Conventions

chx = cyclohexane structure
hx, h, or hex = hexane structure
q = OOH structure
al = carbonyl group
ene or n = C-C double bond
* = double bond
j = radical site
yoij = oxygen containing ring connected on the i and j carbon
bt or but = n-butane structure
dial = di-aldehyde species specifically –C=O group
ol = alcohol group
pro = propane structureSpecies_glos_all.doc

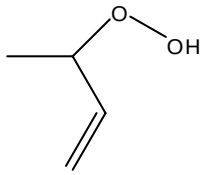
QOOH decomposition routes:
The structure and naming of new species formed via these channels



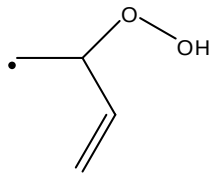
hex1en3q



hx1en3q6j



but1ene3q



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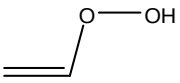
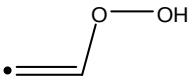
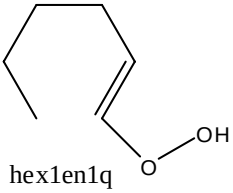


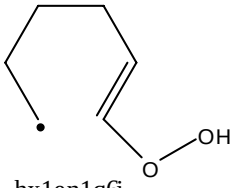
c2h3ooh



c2h2ooh



hex1en1q



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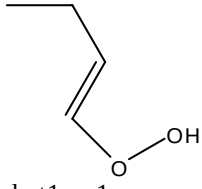
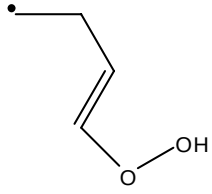
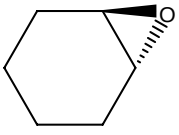


but1ene1q

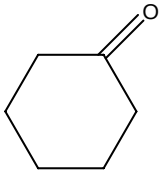


bt1en1q4j

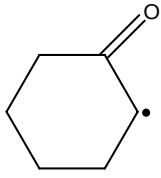


chxyo12

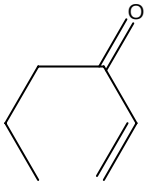
where y = additional ring to chx



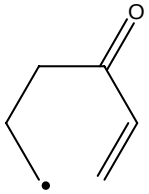
chx1*o



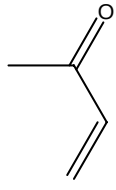
chx1*o2j



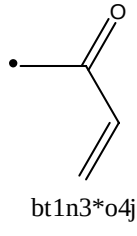
hx1en3*o



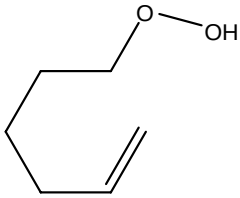
hx1n3*o6j



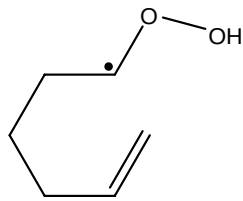
but1en3*o



bt1n3*o4j



hex1en6q



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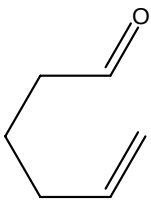
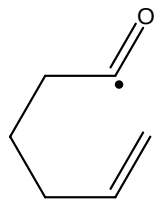
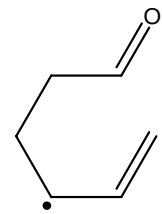


hex5enal



hx5enal1j



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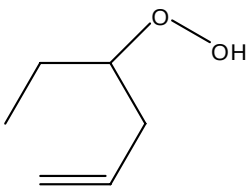

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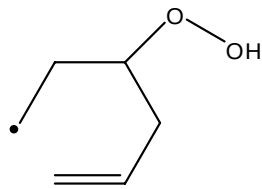

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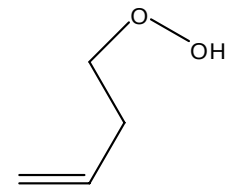

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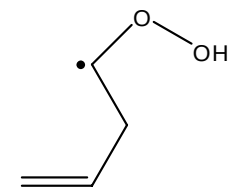

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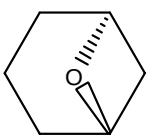
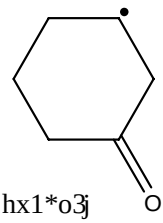
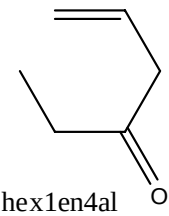


chxyo13



chx1*o3j



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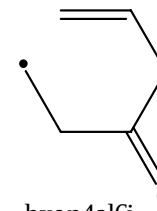

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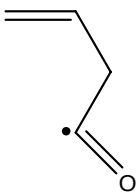

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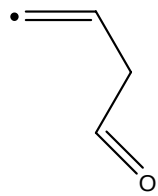

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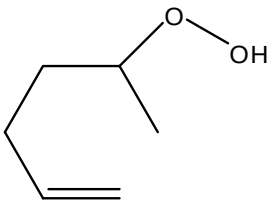

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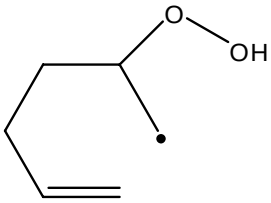

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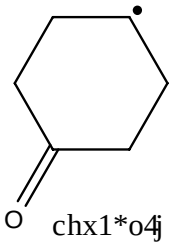
chxyo14



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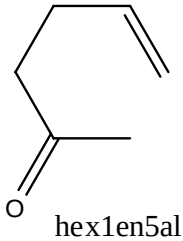

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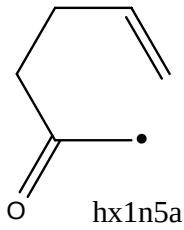
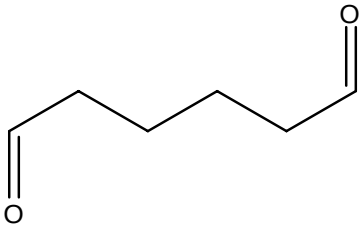
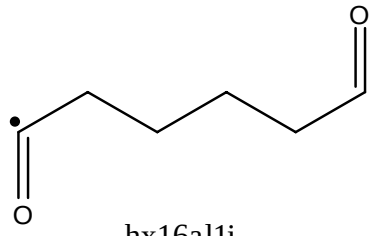


hx1n5al6j

Decomposition of Ketohydroperoxides :
The structure and naming of new species formed via these channels



hex16dial



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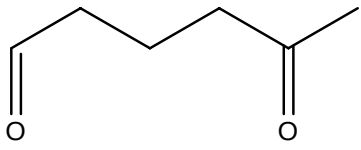
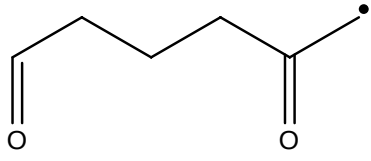


hex15dial



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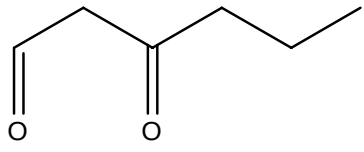
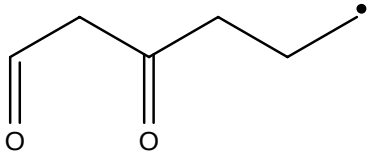


hex13dial



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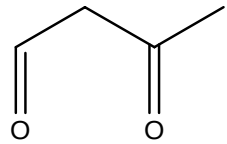
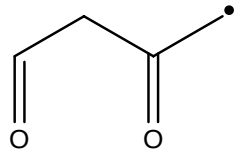


but13dial



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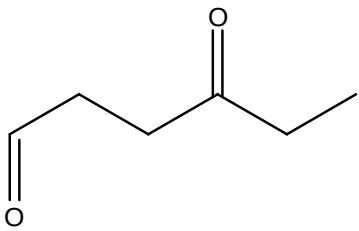
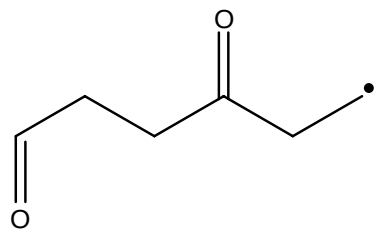
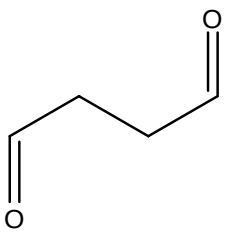


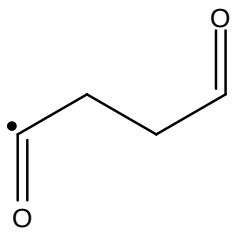
hex14dial



hx14al6j



but14dial



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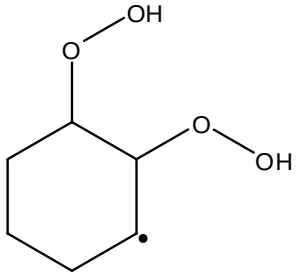
$\cdot O_2QOOH$ Alternatives:
Structure and naming of new species formed via this channel



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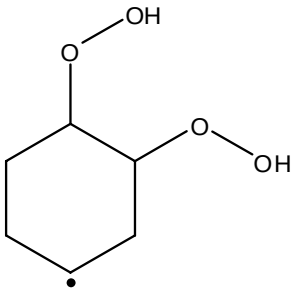

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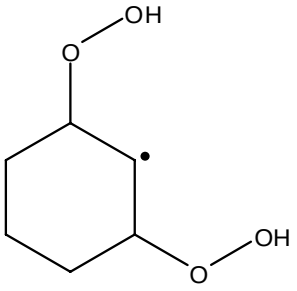

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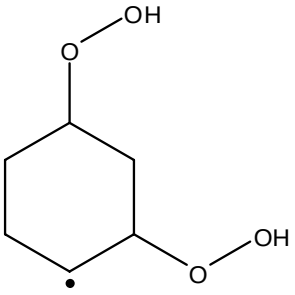

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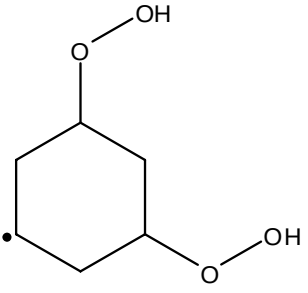

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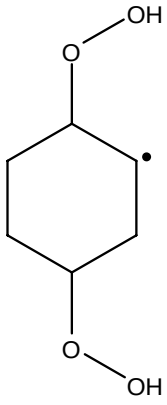

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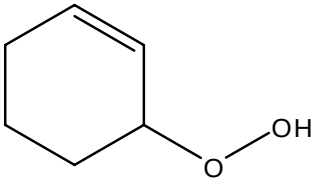
Decomposition of $\cdot O_2QOOH$ Alternatives:
Structure and naming of new species formed via these channels



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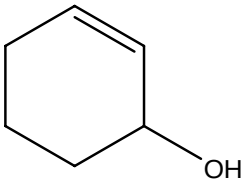
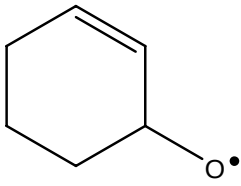


cyhx1n3ol



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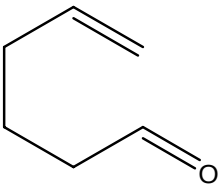
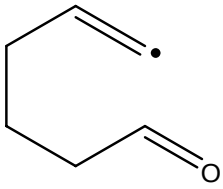


hex1en6al



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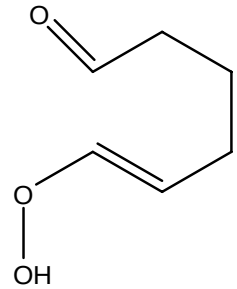

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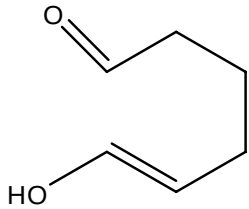
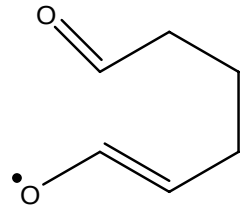


hx1nol6al



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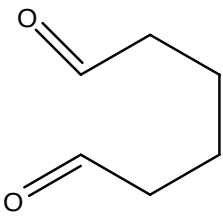

hex16dial
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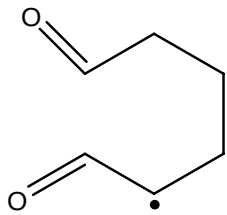

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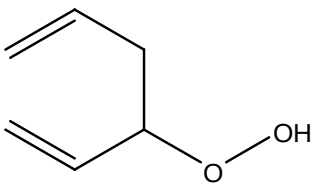

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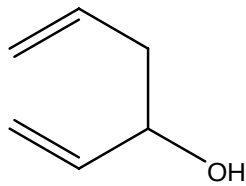

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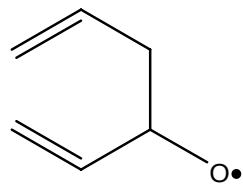

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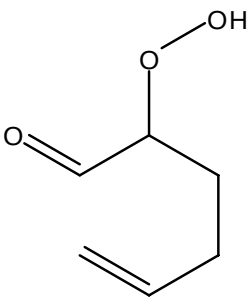

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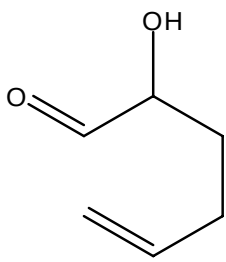

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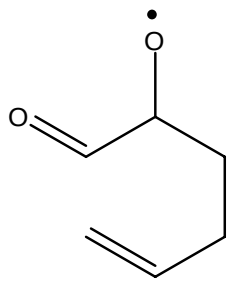

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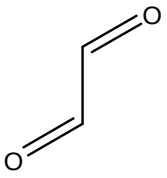
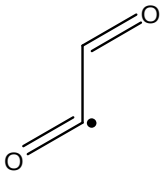
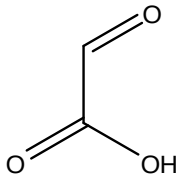


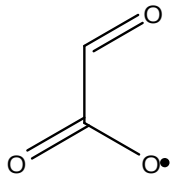
chocho



chocjo



choco2h



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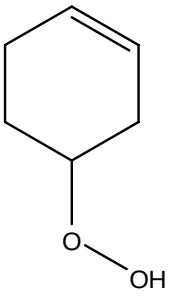

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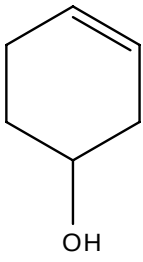

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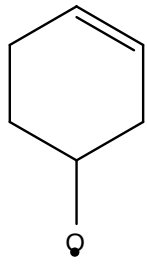

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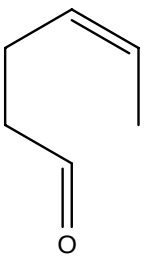

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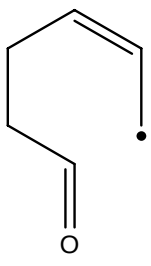

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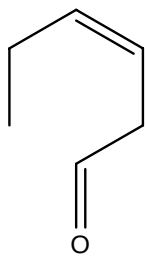

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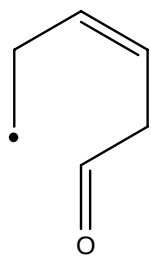

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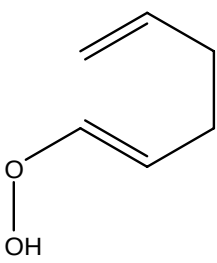

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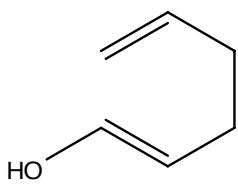

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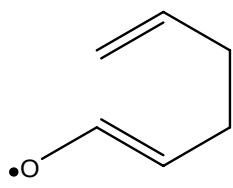

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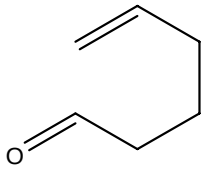

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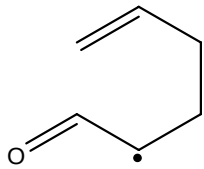

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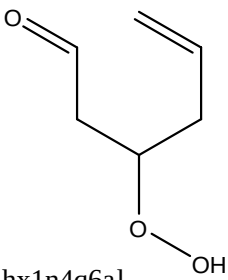

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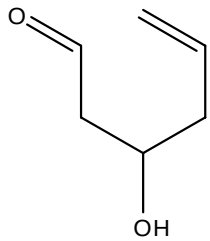

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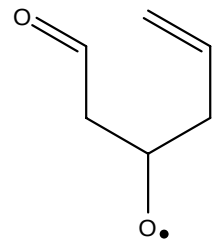

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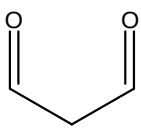

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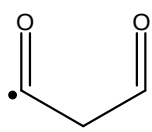

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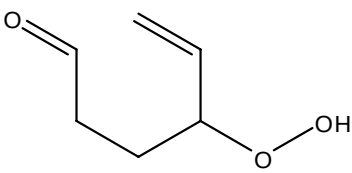

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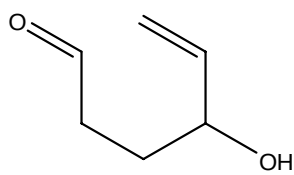

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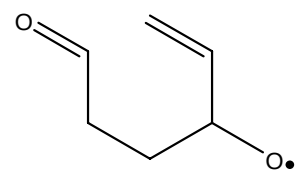

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