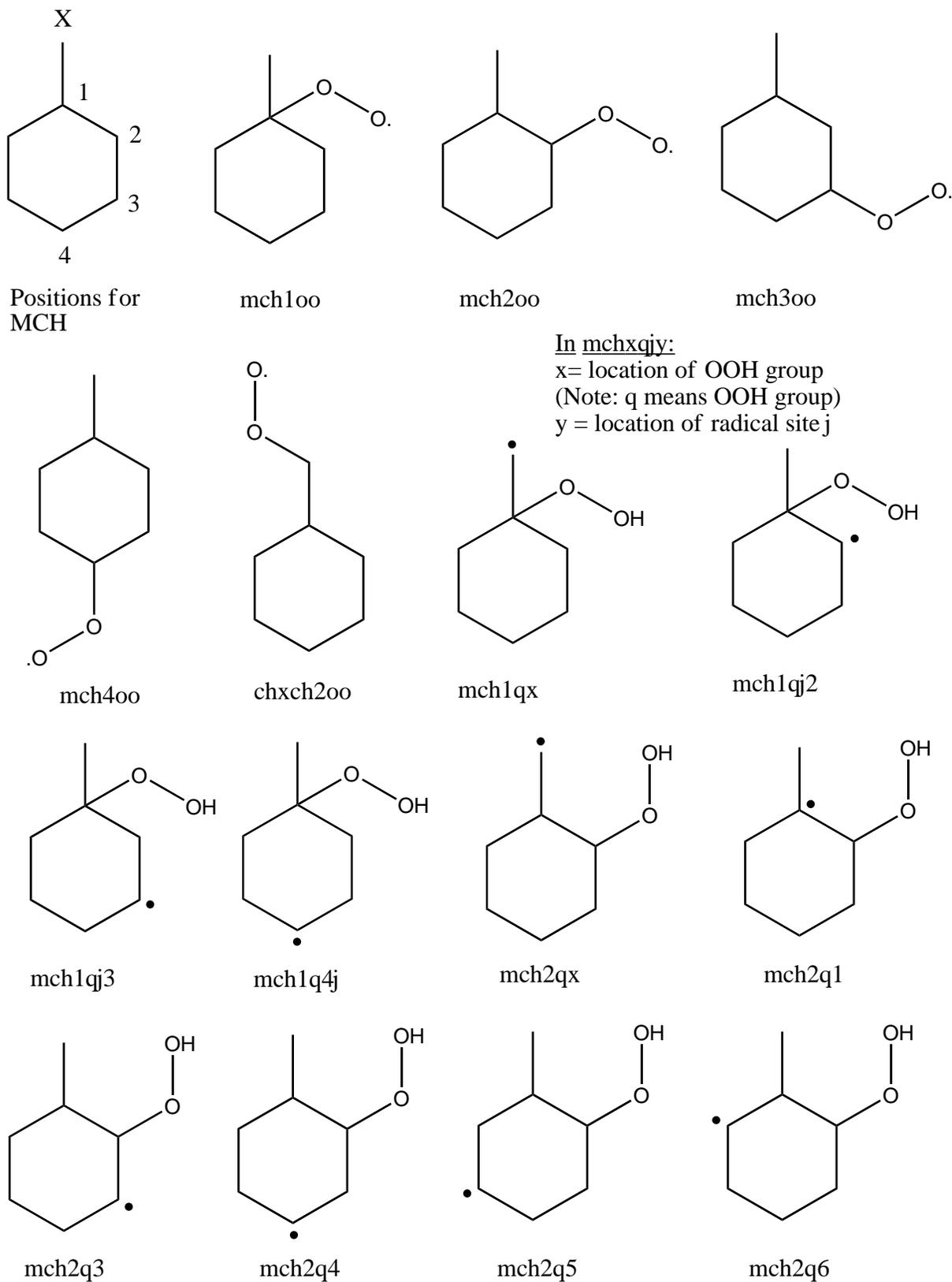


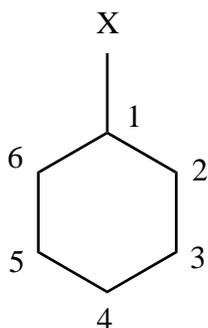
Table S2: Species Glossary of Species Important at Low Temperature for MCH



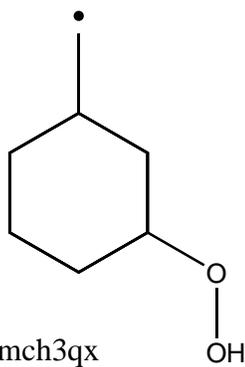
Species Glossary of Species Important at Low Temperature for MCH (Continued)

Note: for mch2xqy and mch3xqy, position 5 and 6 must be defined to account for additional isomers:

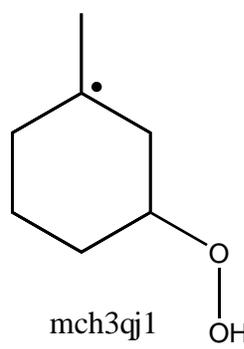
(4-membered and 8-membered ring RO₂ isomerizations were not included due to comparatively low reaction rate constants)



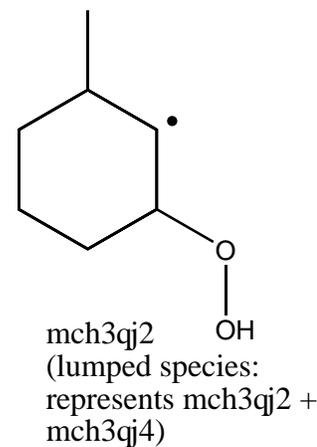
Positions for
MCH



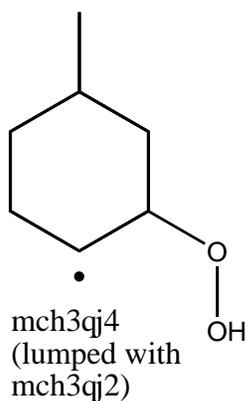
mch3qx
(not included)



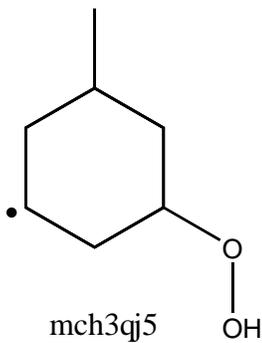
mch3qj1



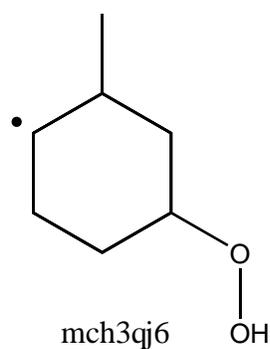
mch3qj2
(lumped species:
represents mch3qj2 +
mch3qj4)



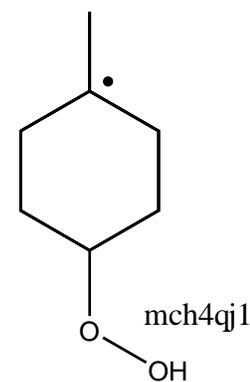
mch3qj4
(lumped with
mch3qj2)



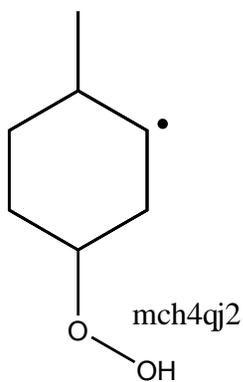
mch3qj5



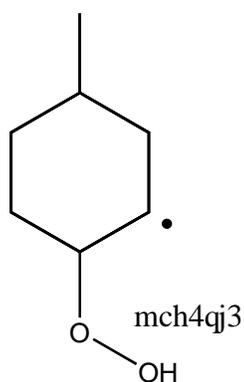
mch3qj6



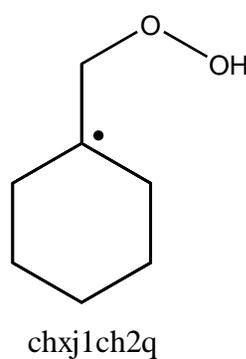
mch4qj1



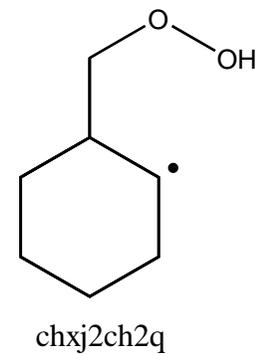
mch4qj2



mch4qj3

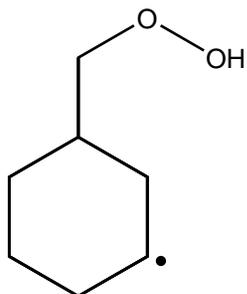


chxj1ch2q

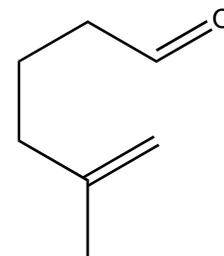
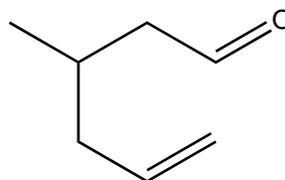
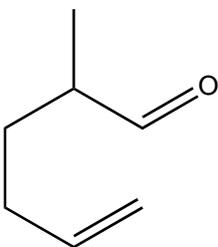


chxj2ch2q

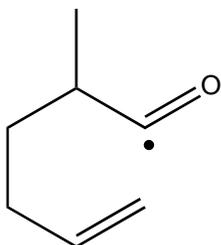
Species Glossary of Species Important at Low Temperature for MCH (Continued)



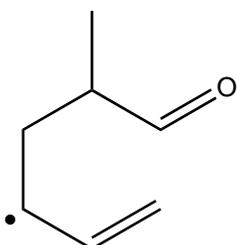
chxj3ch2q
(not included)



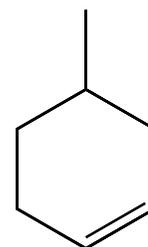
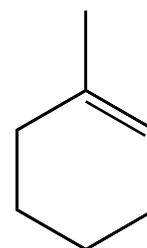
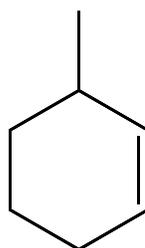
c7ene-one
(lumped species representing 3 species above)



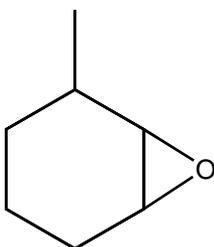
c7ene-onej
(lumped radical species of c7ene-one)
Radical site on formyl group



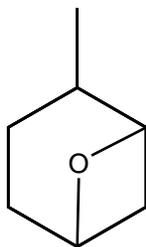
c7enej-one
(lumped radical species of c7ene-one)
Radical site on allylic position



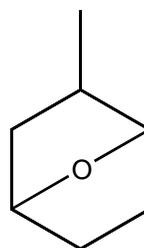
mche
(lumped species representing all three isomers of methyl-cyclohexene)



mcho23
(a lumped species representing all the 1,2-epoxides in methylcyclohexane)

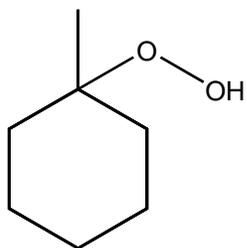


mcho24
(a lumped species representing all the 1,3-epoxides in methylcyclohexane)

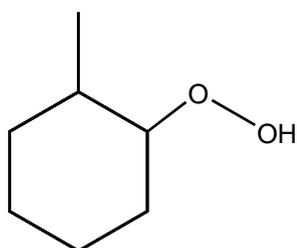


mcho25
(a lumped species representing all the 1,4-epoxides in methylcyclohexane)

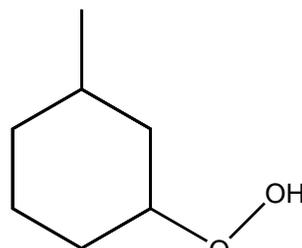
Species Glossary of Species Important at Low Temperature for MCH (Continued)



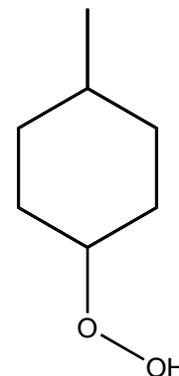
mch1ooh



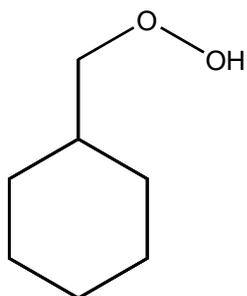
mch2ooh



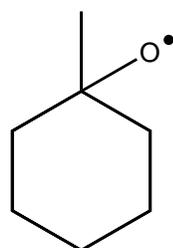
mch3ooh



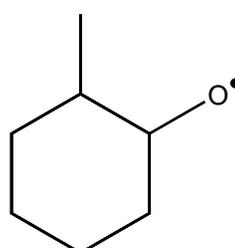
mch4ooh



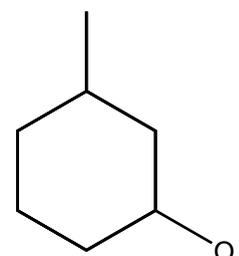
chxch2ooh



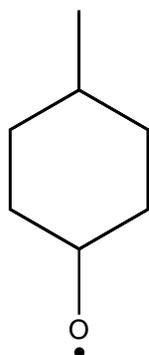
mch1oj



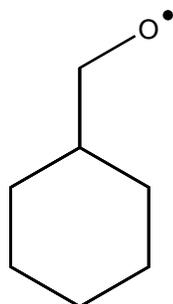
mch2oj



mch3oj

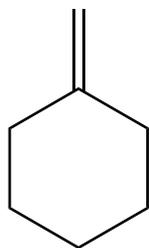


mch4oj

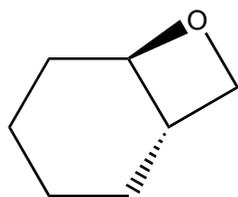


chxch2oj

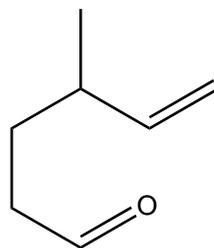
Species Glossary of Species Important at Low Temperature for MCH (Continued)



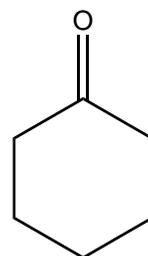
chxdch2



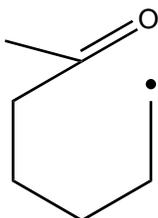
chxyco-2



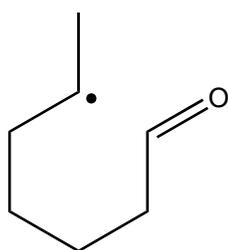
c6h11cho1



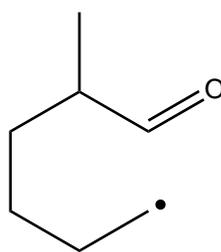
chxdo



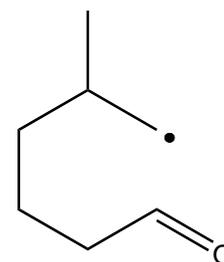
ccoccccc.



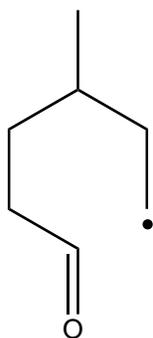
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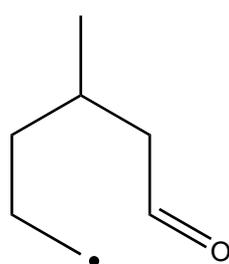
ic6h12cho-5



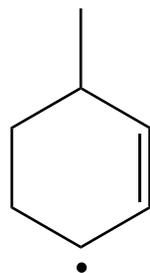
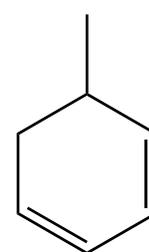
ic6h12cho-2



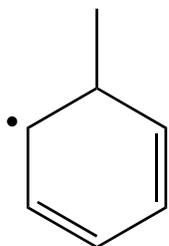
ic6h12cho-3



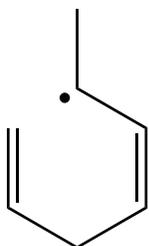
ic6h12cho-4

mchje
(A lumped species for the
methylcyclohexene radical)mchde
(A lumped species for the
methylcyclohexadiene)

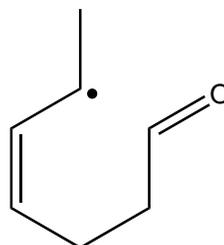
Species Glossary of Species Important at Low Temperature for MCH (Continued)



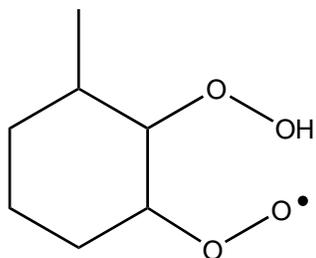
mchjde
(A lumped species for the
methylcyclohexadiene
radical)



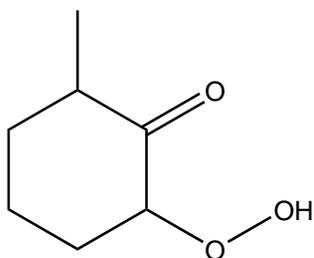
c*ccc*cc.c



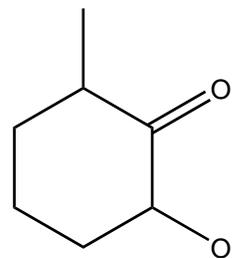
cc.c*ccccO



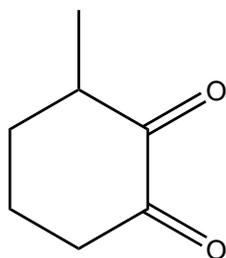
mch2q3qj



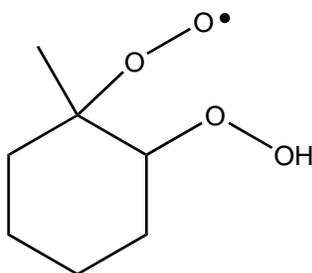
mch2o3q



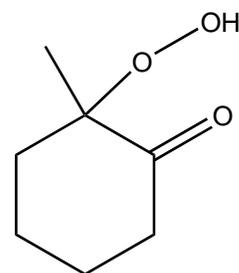
mch2o3oj



mch2o3o

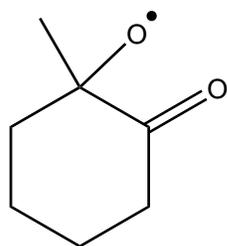


mch2q1qj

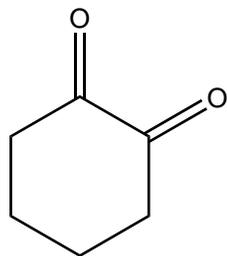


mch2o1q

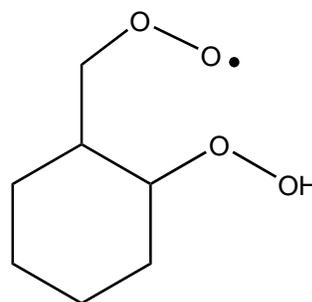
Species Glossary of Species Important at Low Temperature for MCH (Continued)



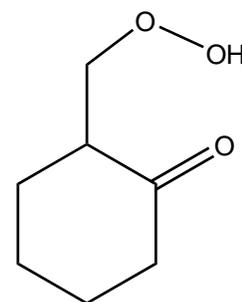
mch2o1oj



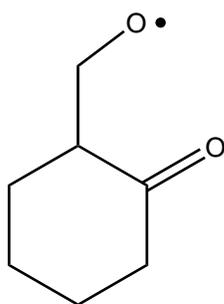
chx1o2o



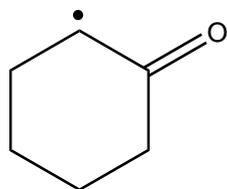
mch2qxqj



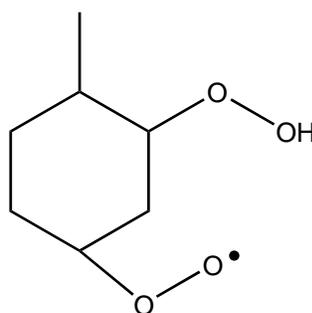
mch2oxq



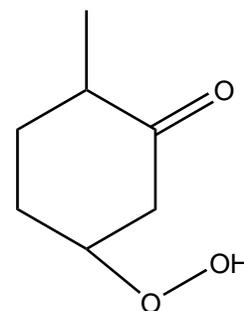
mch2oxoj



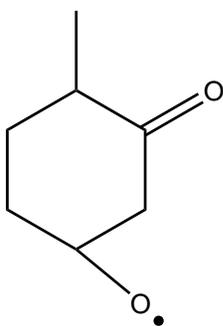
chx1o2j



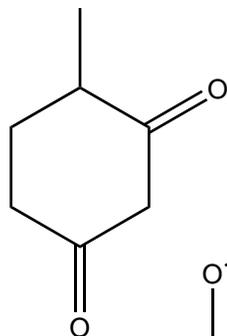
mch2q4qj



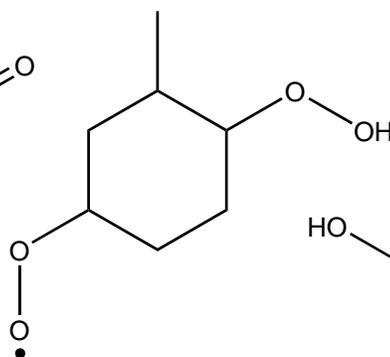
mch2o4q



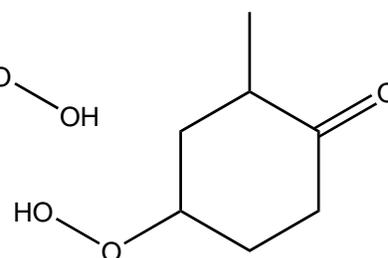
mch2o4oj



mch2o4o

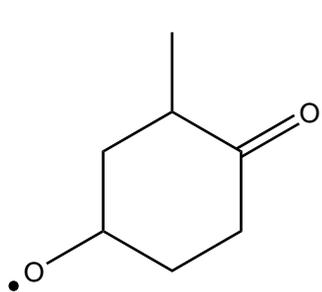


mch2q5qj

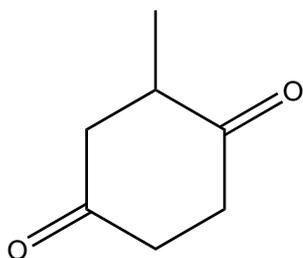


mch2o5q

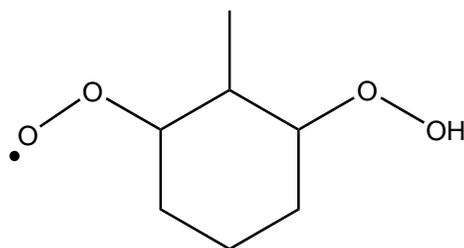
Species Glossary of Species Important at Low Temperature for MCH (Continued)



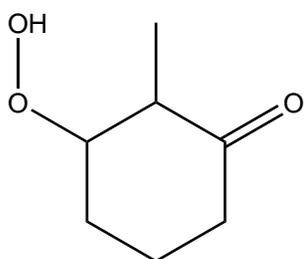
mch2o5oj



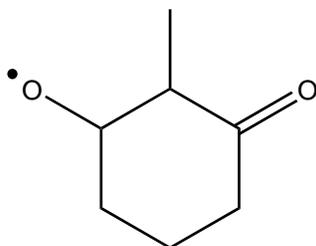
mch2o5o



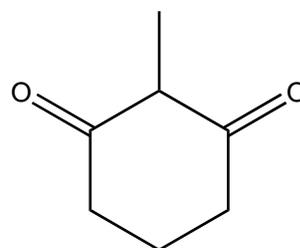
mch2q6qj



mch2o6q



mch2o6oj

mch2o6o
(not included)