CHEM HELP *ASAP*

Organic Chemistry Problem Set with Solutions

Converting Condensed Structural Formulas to Lewis Dot Structures

Instructions: For the questions below, convert the condensed structural formula into a valid Lewis dot structure. Show bonding pairs of electrons as line. Draw lone pairs as two dots. All second-row elements satisfy the octet rule and do not have formal charges.

Suggested playlist:

https://www.youtube.com/watch?v=yyAj6IqN-OY&list=PLIzSRqjN72jfDXnZqaozTjb3KKjpBCUp9

YouTube video of answered questions:

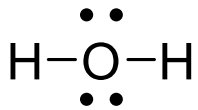
https://youtu.be/WtphrwHU1FQ

Questions:

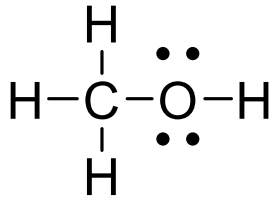
1. H_2O
2. CH_3OH
3. NH_2OH
4. $HOCH_2CH_3$
5. CH_2O
6. $CH_3C(O)CH_3$
7. $HOCH(CH_3)_2$
8. $CH_3CH(OH)CH_3$
9. $(CH_3)_2CHNHCH_3$
10. $CH_3CH(CH_2CH_3)CH_2NH_2$

Solutions

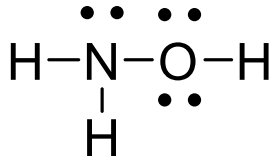
1. H_2O (water)



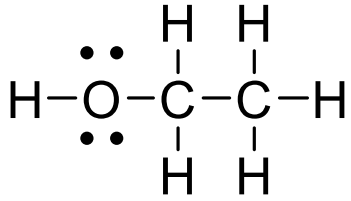
2. CH_3OH (methanol)



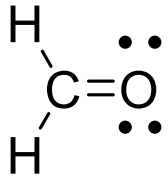
3. NH_2OH (hydroxylamine)



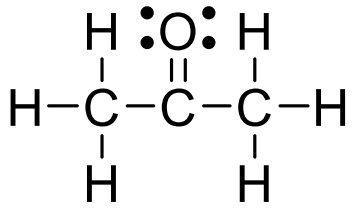
4. $HOCH_2CH_3$ (ethanol)



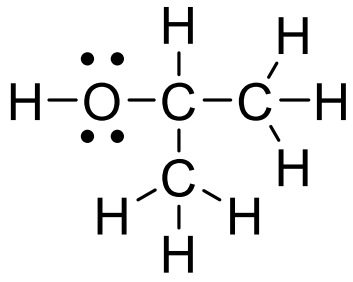
5. CH_2O (formaldehyde)



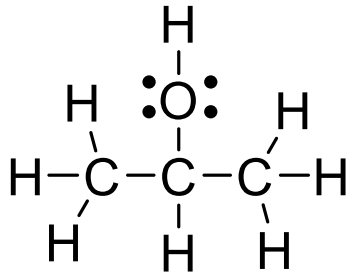
6. $CH_3C(O)CH_3$ (acetone)



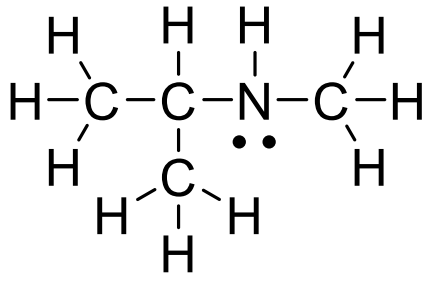
7. $HOCH(CH_3)_2$ (isopropanol)



8. $CH_3CH(OH)CH_3$ (isopropanol)



9. $(CH_3)_2CHNHCH_3$ (*N*-methyl-2-propanamine)



10. $CH_3CH(CH_2CH_3)CH_2NH_2$ (2-methyl-1-butanamine)