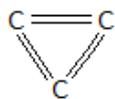


Three carbon atoms can be bound in such ways:

1) linear structure :C=C=C:

2) Cyclic structure:



In the first structure, the two terminal carbon atoms have an incomplete octet. In the second structure the angle strain in cycle is extremely high (C-C-C angle is  $60^\circ$  instead of normal  $180^\circ$  for  $sp$ -hybridization). Therefore, the occurrence of such molecules is unfavourable.