

Nitrobirikmalar. Olinishi va xossalari

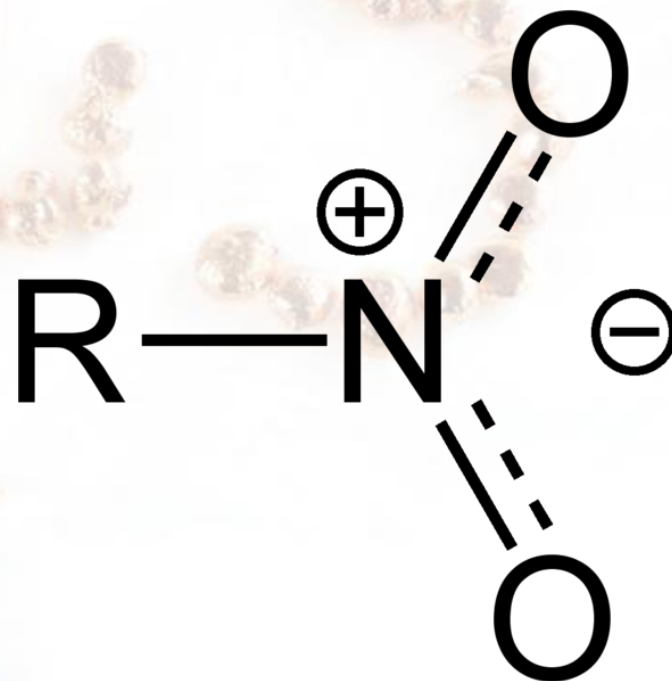


*10-sinf Kimyo fani darsligi
asosida 32-mavzu*

Azotli organik birikmalar deb, molekulasida azot atomi bor bo'lgan organik moddalarga aytiladi.



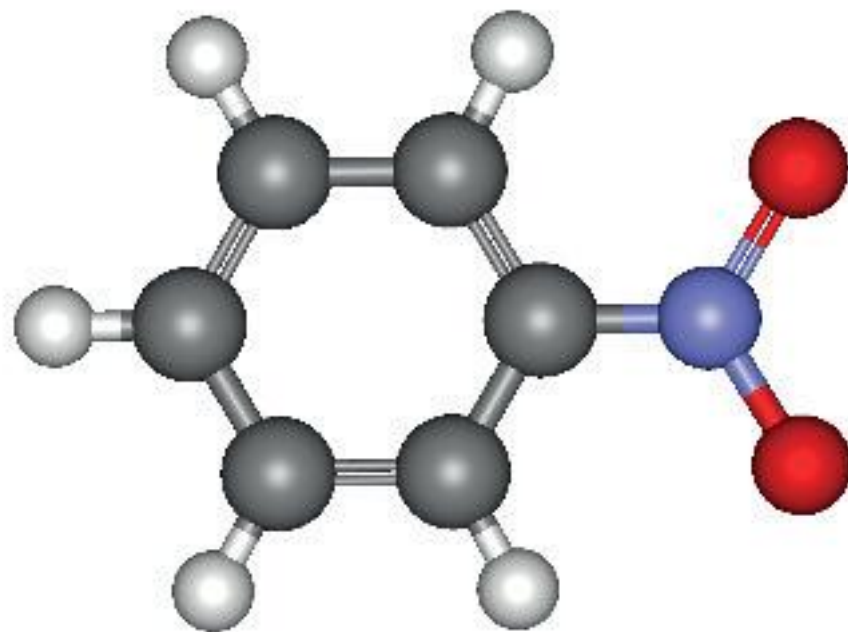
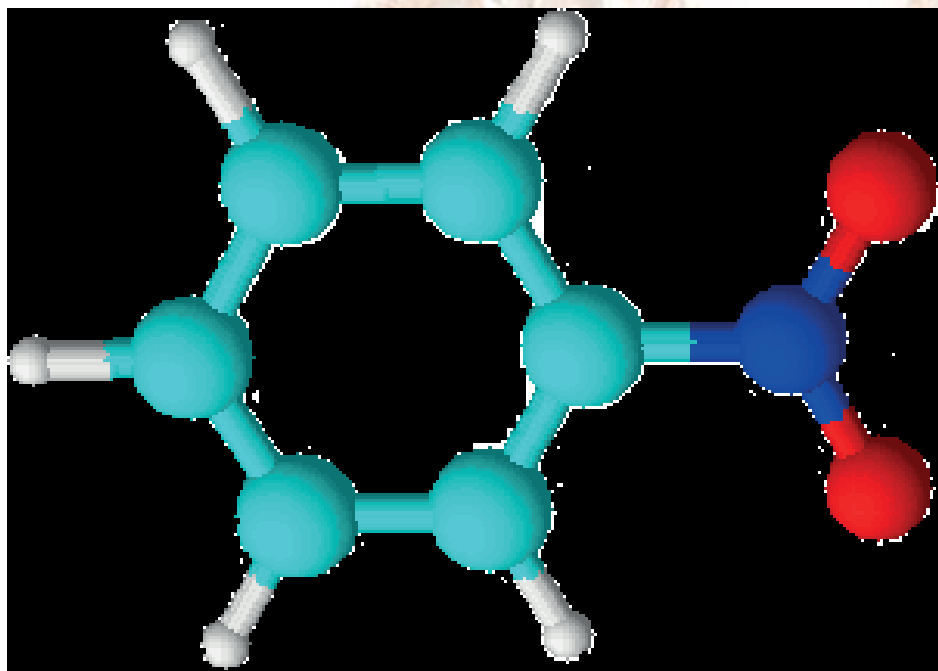
*To'yingan yoki aromatik uglevodorod molekulasidan bitta yoki bir nechta vodorod atomini nitroguruh (NO_2) bilan almashinishidan hosil bo'lgan organik birikmalarga **nitrobirikmalar** deyiladi*



NOMENKLATURASI.

Ratsional nomenklatura bo'yicha nitrobirikmalarni nomlaganda tegishli uglevodorod nomiga „**nitro**“ so'zi qo'shib aytiladi.

CH₃ NO₂ nitrometan CH₃ CH₂ NO₂ nitroetan



Xalqaro (sistematik) nomenklaturaga ko'ra nitrobirikmalar nomlashda quyidagi qoida va ketma-ketlikka amal qilinadi:

- 1. Nitrogruppa asosiy uglerod zanjirida bo'lishi kerak.*
- 2. Asosiy zanjirdagi uglerod atomlarini nitrogruppa yaqin tomondan raqamlab chiqiladi.*
- 3. Yonaki zanjirdagi radikallar yoki nitroguruh nomi ularni asosiy zanjirdagi ular bog'langan uglerodni tartib raqami ko'rsatilgan holda alifbo tartibida aytib o'tiladi va ohirida asosiy zanjirni nomi aytiladi.*



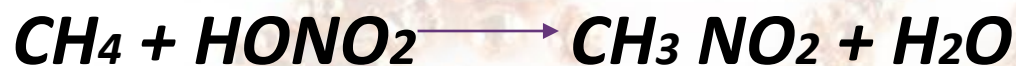
Olinish usullari. Organik moddalarga nitrogruppani kiritish **nitrolash** deb aytiladi.



1. To'yingan uglevodorodlarni nitrolash.

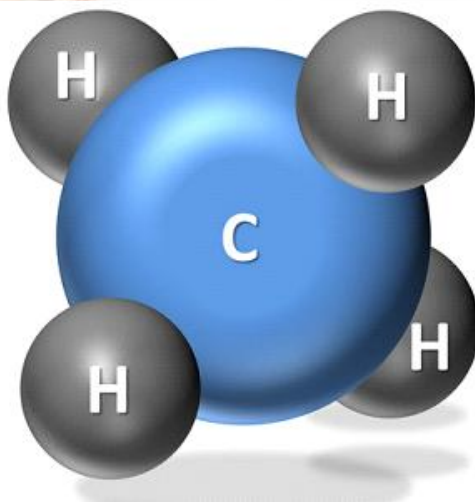
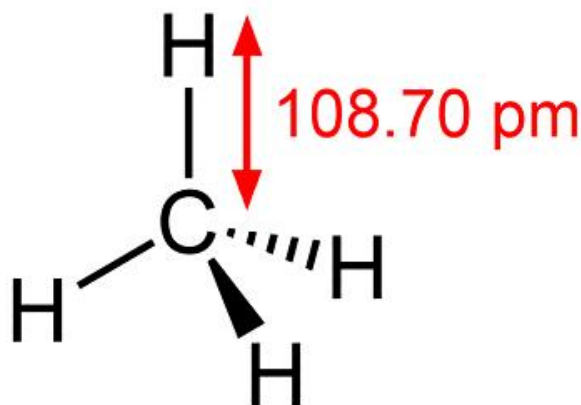
*Buning uchun to'yingan
uglevodorodlarga*

nitrat kislota ta'sir ettiriladi:



metan

nitrometan





**2. Benzolga konsentrlangan
nitrat kislota,
(konsentrlangan sulfat
kislota ishtirokida)
nitrobenzol olinadi.**

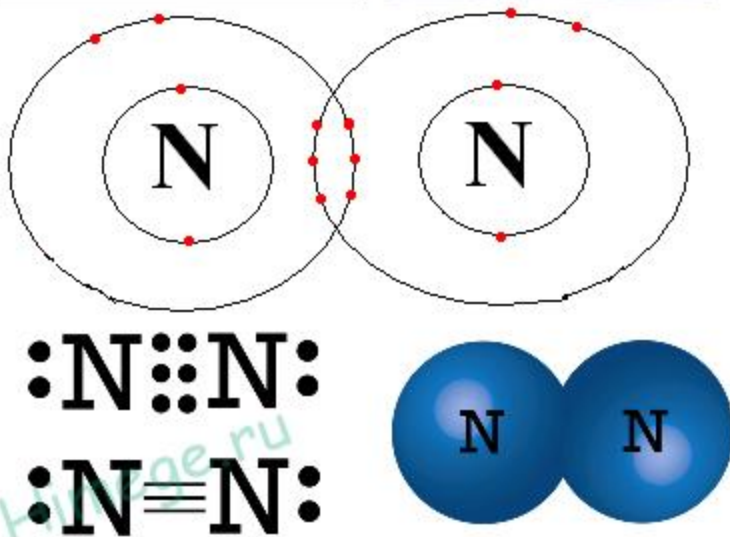
FIZIK XOSSALARI.

*Nitrobirikmalarning quyi
molekulyar gomologlari
qo'lansa hidli, rangsiz
suyuqlik, efirda eriydi,
spirt bilan yaxshi
aralashadi.*

*Nitrobirikmalarning
bug'lari zaharlidir.*



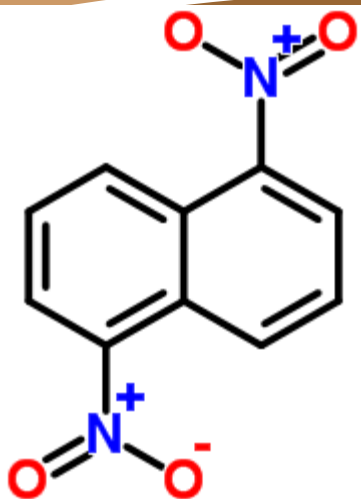
KIMYOViy XOSSALARI.



*Nitrobirikmalarning
kimyoviy xossalari
turlicha
bo'lib, asosan, ularning
molekulasidagi
nitrogruppaga bog'liqdir.*

1. Nitrobirikmalar qaytarilganda birlamchi aminlar hosil bo'лади.





2. Aromatik aminlar, mos ravishdagi aromatik nitrobirikmalarni qaytarish yo'li bilan olinadi:

