

Hisoblash	Alkanol	Alkan diol	Alkan triol	Fenol	Aldegid	Keton
Umumiy formulasi	$C_nH_{2n+1}OH$ $C_nH_{2n+2}O$	$C_nH_{2n}(OH)_2$ $C_nH_{2n+2}O_2$	$C_nH_{2n-1}(OH)_3$ $C_nH_{2n+2}O_3$	$C_nH_{2n-7}OH$ $C_nH_{2n-6}O$	$C_nH_{2n}O$ $C_nH_{2n+1}CHO$	$C_nH_{2n}O$ $(C_nH_{2n+1})_2CO$
Molekular massasi	14n+18	14n+34	14n+50	14n+10	14n+16	14n+16
Uglerod atomlari soni	n	n	n	n	n	n
Vodorod atomlari soni	2n+2	2n+2	2n+2	2n-6	2n	2n
n-(uglerod) eng kichik qiymati	1	2	3	6	1	3
Uglerod-uglerod bog'lari(C-C)	n-1	n-1	n-1	n+3	n-1	n-1
Uglerod-vodorod bog'lari(C-H)	2n+1	2n	2n-1	2n-7	2n	2n
Qutbsiz bog'lar (polyarmas bog'lar)	n-1	n-1	n-1	n+3	n-1	n-1
Qutbli bog'lar (polyar bog'lar)	2n+2	2n+2	2n+2	2n-6	2n+2	2n+2
sp ³ -gibrid orbital(molekulada)	4n+4	4n+8	4n+12	4n-20	4n-4	4n-4
Gibrid orbitallar(molekulada)	4n+4	4n+8	4n+12	4n-2	4n+2	4n+2
Gibridlanmagan orbitallar	2n+2	2n+2	2n+2	2n	2n+2	2n+2
Atomlar soni	3n+3	3n+4	3n+5	3n-5	3n+1	3n+1
Uglerod atomi oksidlanish darajasi yig'indisi	-2n	-(2n-2)	-(2n-4)	-(2n-8)	-(2n-2)	-(2n-2)
Jami bog'lar soni	3n+2	3n+3	3n+4	3n-2	3n+1	3n+1
Jami o-bog'lar soni	3n+2	3n+3	3n+4	3n-5	3n	3n
Bog' hosil qilishdagi orbitallar soni	6n+4	6n+6	6n+8	6n-4	6n+2	6n+2
Bog'lanishdagi orbitallar soni	6n+4	6n+6	6n+8	6n-4	6n+2	6n+2
o-bog' hosil qilishdagi orbital lar soni	6n+4	6n+6	6n+8	6n-10	6n	6n
1 moli yonganda CO ₂ koef.	n	n	n	n	n	n
1 moli yonganda H ₂ O koef.	n+1	n+1	n+1	n-3	n	n
1 moli yonganda O ₂ koef	1,5n	1,5n-0,5	1,5n-1	1,5n-2	1,5n-0,5	1,5n-1,5
1 moli yonganda CO ₂ massasi	44n	44n	44n	44n	44n	44n
1 moli yonganda H ₂ O massasi	18n+18	18n+18	18n+18	18n-54	18n	18n
Jami protonlar soni	8n+10	8n+18	8n+26	8n+2	8n+8	8n+8
Jami elektronlar soni	8n+10	8n+18	8n+26	8n+2	8n+8	8n+8
Jami neytronlar soni(¹² C)	6n+8	6n+16	6n+24	6n+8	6n+8	6n+8
Jami zarrachalar soni (proton+elektron+neytron)	22n+28	22n+52	22n+76	22n+12	22n+24	22n+24
Jami neytronlar soni (¹³ C)	7n+8	7n+16	7n+24	7n+8	7n+8	7n+8
Jami neytronlar soni (¹⁴ C)	8n+8	8n+16	8n+24	8n+8	8n+8	8n+8
sp ³ -s qoplanish(bog'lanish)	2n+2	2n+2	2n+2	3n-17	2n-1	2n
sp ³ -sp ³ -qoplanish soni (bog'lanishlar soni)	n	n+1	n+2	n-7	n-2	n-3
Umumiy yonish tenglamasida chap tomon koef. yig'indisi	1,5n+1	1,5n+0,5	1,5n	1,5n-1	1,5n+0,5	1,5n+0,5
Umumiy yonish tenglamasida o'ng tomon koef. yig'indisi	2n+1	2n+1	2n+1	2n-3	2n	2n
Umumiy yonish tenglamasida o'ng va chap tomon koef. ayirmasi	0,5n	0,5n+0,5	0,5n+1	0,5n-2	0,5n-0,5	0,5n-0,5
Umumiy yonish tenglamasida o'ng va chap tomon koef. yig'indisi	3,5n+2	3,5n+1,5	3,5n+1	3,5n-4	3,5n+0,5	3,5n+0,5
(C-H) + (C-C) bog'lari yig'indisi	3n	3n-1	3n-2	3n-4	3n-1	3n-1
(C-H) – (C-C) bog'lari ayirmasi	n+2	n+1	n	n-4	n+1	n+1
Qutbli bog' va qutbsiz bog' yig'indisi	3n+1	3n+1	3n+1	3n-3	3n+1	3n+1
Qutbli bog' va qutbsiz bog' ayirmasi	n+3	n+3	n+3	n-9	n+3	n+3
sp ³ -gibrid orbital(bog'lanishda)	4n+2	4n+4	4n+6	4n-22	4n-4	4n-4
Gibrid orbitallar(bog'lanishdagi)	4n+2	4n+4	4n+6	4n-4	4n	4n

*Chumoli aldegid sp³-s qolanish yo'q umumiy formulaga bo'ysunmaydi

*Fenol sp³-sp³ qoplanish yo'q umumiy formulaga bo'ysunmaydi

*Chumoli aldegidda sp³-sp³ yo'q umumiy formulaga bo'ysunmaydi

Hisoblash	To'yingan mono kislota	To'yingan dikarbon kislota	Murakkab efir (to'yingan)	Oddiy efir (to'yingan)	Mono saxarid
Umumiy formulasi	$C_nH_{2n}O_2$ $C_nH_{2n+1}COOH$	$C_nH_{2n-2}O_4$ $(CH_2)_n(COOH)_2$	$C_nH_{2n}O_2$ $(C_nH_{2n+1})_2COO$	$C_nH_{2n+2}O$ $(C_nH_{2n+1})_2O$	$C_nH_{2n}O_n$ $(CH_2O)_n$
Molekular massasi	$14n+32$	$14n+62$	$14n+32$	$14n+18$	$30n$
Uglerod atomlari soni	n	n	n	n	n
Vodorod atomlari soni	2n	2n-2	2n	2n+2	2n
n-(uglerod) eng kichik qiymati	1	2	2	2	3
Uglerod-uglerod bog'lari(C-C)	n-1	n-1	n-2	n-2	n-1
Uglerod-vodorod bog'lari(C-H)	2n-1	2n-4	2n	2n+2	n+1
Qutbsiz bog'lar (polyarmas bog'lar)	n-1	n-1	n-2	n-2	n-1
Qutbli bog'lar (polyar bog'lar)	2n	2n-2	2n	2n+2	2n
sp ³ -gibrid orbital(molekuladagi)	4n	4n	4n	4n+4	8n-8
Gibrid orbitallar(molekuladagi)	4n+6	4n+12	4n+6	4n+4	8n-2
Gibridlanmagan orbitallar	2n+2	2n+2	2n+2	2n+2	2n+2
Atomlar soni	3n+2	3n+2	3n+2	3n+3	4n
Uglerod atomi oksidlanish darajasi yig'indisi	-(2n-4)	-(2n-10)	-(2n-4)	-2n	0 =formula shart emas
Jami bog'lar soni	3n+2	3n+3	3n+2	3n+2	4n
Jami o-bog'lar soni	3n+1	3n+1	3n+1	3n+2	4n-1
Bog' hosil qilishdagi orbitallar soni	6n+4	6n+6	6n+4	6n+4	8n
Bog'lanishdagi orbitallar soni	6n+4	6n+6	6n+4	6n+4	8n
o-bog' hosil qilishdagi orbitallar soni	6n+2	6n+2	6n+2	6n+4	8n-2
1 moli yonganda CO ₂ koef.	n	n	n	n	n
1 moli yonganda H ₂ O koef.	n	n-1	n	n+1	n
1 moli yonganda O ₂ koef	1,5n-1	1,5n-2,5	1,5n-1	1,5n	n
1 moli yonganda CO ₂ massasi	44n	44n	44n	44n	44n
1 moli yonganda H ₂ O massasi	18n	18n-18	18n	18n+18	18n
Jami protonlar soni	8n+16	8n+30	8n+16	8n+10	16n
Jami elektronlar soni	8n+16	8n+30	8n+16	8n+10	16n
Jami neytronlar soni(¹² C)	6n+16	6n+32	6n+16	6n+16	14n
Jami zarrachalar soni (proton+elektron+neytron)	22n+48	22n+92	22n+48	22n+36	22n+46
Jami neytronlar soni (¹³ C)	7n+16	7n+32	7n+16	7n+16	15n
Jami neytronlar soni (¹⁴ C)	8n+16	8n+32	8n+16	8n+16	16n
Umumiy yonish tenglamasida chap tomon koef. yig'indisi	1,5n	1,5n-1,5	1,5n	1,5n+1	n+1
Umumiy yonish tenglamasida o'ng tomon koef. yig'indisi	2n	2n-1	2n	2n+1	2n
Umumiy yonish tenglamasida o'ng va chap tomon koef. ayirmasi	0,5n	0,5n+0,5	0,5n	0,5n	n-1
Umumiy yonish tenglamasida o'ng va chap tomon koef. yig'indisi	3,5n	3,5n-2,5	3,5n	3,5n+2	3n+1
(C-H) + (C-C) bog'lari yig'indisi	3n-2	3n-5	3n-2	3n	2n
(C-H) - (C-C) bog'lari ayirmasi	n	n-3	n+2	n+4	2
sp ³ -s qoplanish (bog'lanish)	2n	2n-2	2n	2n+2	2n-1
Qutbli bog' va qutbsiz bog' yig'indisi	3n-1	3n-3	3n-2	3n	3n-1
Qutbli bog' va qutbsiz bog' ayirmasi	n+1	n-1	n+2	n+4	n+1
sp ³ -sp ³ -qoplanish soni (bog'lanishlar soni)	n-2	n-3	n-2	n	2n-3
sp ³ -gibrid orbital(bog'lanishdagi)	4n-2	4n-4	4n-2	4n+2	6n-6
Gibrid orbitallar(bog'lanishdagi)	4n+2	4n+4	4n+2	4n+2	8n-8

***Dezoksiriboza** umumiy formulaga bo'ysunmaydi $CH_2(OH)CH(OH)CH(OH)CH_2CHO$

***Chumoli kislota** sp³-s qoplanish va sp³-sp³ qoplanish umumiy formulaga bo'ysunmaydi

***Chumoli kislota efirlari** sp³-s qoplanish: **2n-1** formula; sp³-sp³ qoplanish: **n-1** formula

***Oksolat kislota** sp³-sp³ qoplanish umumiy formulaga bo'ysunmaydi

Hisoblash	Alkenol	Alkinol	Siklo alkenol	Ikki atomli fenol	Uch atomli fenol
Umumiy formulasi	$C_nH_{2n-1}OH$ $C_nH_{2n}O$	$C_nH_{2n-3}OH$ $C_nH_{2n-2}O$	$C_nH_{2n-1}OH$ $C_nH_{2n}O$	$C_nH_{2n-8}(OH)_2$ $C_nH_{2n-6}O_2$	$C_nH_{2n-9}(OH)_3$ $C_nH_{2n-6}O_3$
Molekular massasi	$14n+16$	$14n+14$	$14n+16$	$14n+26$	$14n+42$
Uglerod atomlari soni	n	n	n	n	n
Vodorod atomlari soni	2n	2n-2	2n	2n-6	2n-6
n-(uglerod) eng kichik qiymati	3	3	3	6	6
Uglerod-uglerod bog'lari(C-C)	n	n+1	n	n+3	n+3
Uglerod-vodorod bog'lari(C-H)	2n-1	2n-3	2n-1	2n-8	2n-9
Qutbsiz bog'lar (polyarmas bog'lar)	n	n+1	n	n+3	n+3
Qutbli bog'lar (polyar bog'lar)	2n+1	2n-1	2n+1	2n-4	2n-3
sp ³ -gibrid orbital(molekuladagi)	4n-4	4n-4	4n+4	4n-16	4n-12
Gibrid orbitallar(molekuladagi)	4n+2	4n	4n+4	4n+2	4n+6
Gibridlanmagan orbitallar	2n+2	2n+2	2n	2n	2n
Atomlar soni	3n+1	3n-1	3n+1	3n-4	3n-3
Uglerod atomi oksidlanish darajasi yig'indisi	-(2n-2)	-(2n-4)	-(2n-2)	-(2n-10)	-(2n-12)
Jami bog'lar soni	3n+1	3n	3n+1	3n-1	3n
Jami o-bog'lar soni	3n	3n-2	3n	3n-4	3n-3
Bog' hosil qilishdagi orbitallar soni	6n+2	6n	6n+2	6n-2	6n
Bog'lanishdagi orbitallar soni	6n+2	6n	6n+2	6n-2	6n
o-bog' hosil qilishdagi orbitallar soni	6n	6n-4	6n	6n-8	6n-6
1 moli yonganda CO ₂ koef.	n	n	n	n	n
1 moli yonganda H ₂ O koef.	n	n-1	n	n-3	n-3
1 moli yonganda O ₂ koef	1,5n-0,5	1,5n-1	1,5n-0,5	1,5n-2,5	1,5n-3
1 moli yonganda CO ₂ massasi	44n	44n	44n	44n	44n
1 moli yonganda H ₂ O massasi	18n	18n-18	18n	18n-54	18n-54
Jami protonlar soni	8n+8	8n+6	8n+8	8n+10	8n+18
Jami elektronlar soni	8n+8	8n+6	8n+8	8n+10	8n+18
Jami neytronlar soni (¹² C)	6n+8	6n+8	6n+8	6n+16	6n+24
Jami zarrachalar soni (proton+elektron+neytron)	22n+24	22n+20	22n+24	22n+36	22n+60
Jami neytronlar soni (¹³ C)	7n+8	7n+8	7n+8	7n+16	7n+24
Jami neytronlar soni (¹⁴ C)	8n+8	8n+8	8n+8	8n+16	8n+24
sp ³ -s qoplanish(bog'lanish)	2n-3	2n-3	2n	3n-16	3n-15
sp ³ -sp ³ -qoplanish soni (bog'lanishlar soni)	n-2	n-2	n+1	n-7	n-7
Umumiy yonish tenglamasida chap tomon koef. yig'indisi	1,5n+0,5	1,5n	1,5n+0,5	1,5n-1,5	1,5n-2
Umumiy yonish tenglamasida o'ng tomon koef. yig'indisi	2n	2n-1	2n	2n-3	2n-3
Umumiy yonish tenglamasida o'ng va chap tomon koef. ayirmasi	0,5n-0,5	0,5n-1	0,5n-0,5	0,5n-1,5	0,5n-1
Umumiy yonish tenglamasida o'ng va chap tomon koef. yig'indisi	3,5n+0,5	3,5n-1	3,5n+0,5	3,5n-4,5	3,5n-5
(C-H) + (C-C) bog'lari yig'indisi	3n-1	3n-2	3n-1	3n-5	3n-6
(C-H) - (C-C) bog'lari ayirmasi	n-1	n-4	n-1	n-11	n-12
Qutbli bog' va qutbsiz bog' yig'indisi	3n+1	3n	3n+1	3n-1	3n
Qutbli bog' va qutbsiz bog' ayirmasi	n+1	n-2	n+1	n-7	n-6
Gibrid orbitallar(bog'lanishdagi)	4n	4n-2	4n+2	4n-2	4n

*Ikki atomli fenolda sp³-sp³ qoplanish (bog'lanish) yo'q umumiy formulaga bo'ysunmaydi

*Uch atomli fenolda sp³-sp³ qoplanish (bog'lanish) yo'q umumiy formulaga bo'ysunmaydi

Hisoblash	Alkan dial	Diketon	Alken mono karbon	Alkin mono karbon	To'y.magan murakkab efir
Umumiy formulasi	$C_nH_{2n-2}O_2$ (CH_2) _n (CHO) ₂	$C_nH_{2n-2}O_2$ (CH_2) _n (CO) ₂	$C_nH_{2n-2}O_2$ $C_nH_{2n-1}COOH$	$C_nH_{2n-4}O_2$ $C_nH_{2n-3}COOH$	$C_nH_{2n-2}O_2$ $RCOOC_nH_{2n-1}$
Molekular massasi	14n+30	14n+30	14n+30	14n+28	14n+30
Uglerod atomlari soni	n	n	n	n	n
Vodorod atomlari soni	2n-2	2n-2	2n-2	2n-4	2n-2
n-(uglerod) eng kichik qiymati	2	4	3	3	3
Uglerod-uglerod bog'lari(C-C)	n-1	n-1	n	n+1	n-1
Uglerod-vodorod bog'lari(C-H)	2n-2	2n-2	2n-3	2n-5	2n-2
Qutbsiz bog'lar (polyarmas bog'lar)	n-1	n-1	n	n+1	n-1
Qutbli bog'lar (polyar bog'lar)	2n+2	2n+2	2n+1	2n-1	2n+2
sp ³ -gibrid orbital(molekulada)	4n-8	4n-8	4n-8	4n-8	4n-8
Gibrid orbitallar(molekuladagi)	4n+4	4n+4	4n+4	4n+2	4n+2
Gibridlanmagan orbitallar	2n+2	2n+2	2n+2	2n+2	2n+2
Atomlar soni	3n	3n	3n	3n-2	3n
Uglerod atomi oksidlanish darajasi yig'indisi	-(2n-6)	-(2n-6)	-(2n-6)	-(2n-6)	-(2n-6)
Jami bog'lar soni	3n+1	3n+1	3n+1	3n	3n+1
Jami o-bog'lar soni	3n-1	3n-1	3n-1	3n-3	3n-1
Bog' hosil qilishdagi orbitallar soni	6n+2	6n+2	6n+2	6n	6n+2
Bog'lanishdagi orbitallar soni	6n+2	6n+2	6n+2	6n	6n+2
σ-bog' hosil qilishdagi orbitallar soni	6n-2	6n-2	6n-2	6n-6	6n-2
1 moli yonganda CO ₂ koef.	n	n	n	n	n
1 moli yonganda H ₂ O koef.	n-1	n-1	n-1	n-2	n-1
1 moli yonganda O ₂ koef	1,5n-1,5	1,5n-1,5	1,5n-1,5	1,5n-2	1,5n-1,5
1 moli yonganda CO ₂ massasi	44n	44n	44n	44n	44n
1 moli yonganda H ₂ O massasi	18n-18	18n-18	18n-18	18n-36	18n-18
Jami protonlar soni	8n+14	8n+14	8n+14	8n+12	8n+14
Jami elektronlar soni	8n+14	8n+14	8n+14	8n+12	8n+14
Jami neytronlar soni(¹² C)	6n+16	6n+16	6n+16	6n+16	6n+16
Jami zarrachalar soni (proton+elektron+neytron)	22n+44	22n+44	22n+44	22n+40	22n+44
Jami neytronlar soni (¹³ C)	7n+16	7n+16	7n+16	7n+16	7n+16
Jami neytronlar soni (¹⁴ C)	8n+16	8n+16	8n+16	8n+16	8n+16
sp ³ -s qoplanish(bog'lanish)	2n-4	2n-4	2n-5	2n-5	2n-5
Umumiy yonish tenglamasida chap tomon koef. yig'indisi	1,5n-0,5	1,5n-0,5	1,5n-0,5	1,5n-1	1,5n-0,5
Umumiy yonish tenglamasida o'ng tomon koef. yig'indisi	2n-1	2n-1	2n-1	2n-2	2n-1
Umumiy yonish tenglamasida o'ng va chap tomon koef. ayirmasi	0,5n-0,5	0,5n-0,5	0,5n-0,5	0,5n-1	0,5n-0,5
Umumiy yonish tenglamasida o'ng va chap tomon koef. yig'indisi	3,5n-1,5	3,5n-1,5	3,5n-1,5	3,5n-3	3,5n-1,5
(C-H) + (C-C) bog'lari yig'indisi	3n-3	3n-3	3n-3	3n-4	3n-3
(C-H) – (C-C) bog'lari ayirmasi	n-1	n-1	n-3	n-4	n-1
Qutbli bog' va qutbsiz bog' yig'indisi	3n+1	3n+1	3n+1	3n	3n+1
Qutbli bog' va qutbsiz bog' ayirmasi	n+3	n+3	n+1	n-2	n+3
Gibrid orbitallar(bog'lashdagi)	4n	4n	4n	4n-2	4n

*Vinilasetat sp³-s qoplanish umumiy formulaga bo'ysunmaydi