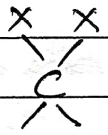
- Nomenclature of Haloalkanes and Haloarenes :-

(i) Naming haloalkanes. (Mono)

	Common Name	I.U.P.A.C.
CH_3Cl	Methyl chloride	Chloro methane
$CH_3CH_2CH_2Br$	n-Propyl Bromide	Bromo Propane
$CH_3-\underset{\underset{CH_3}{|}}{CH}-CH_2Cl$	iso-butyl chloride	1-chloro 2-methyl-Propane
$CH_3-\underset{\underset{CH_3}{|}}{\overset{\overset{CH_3}{|}}{C}}-CH_2-Cl$	neo-Pentyl chloride	1 chloro, 2,2-dimethyl Propane

(ii) Dihalo and Polyhalo

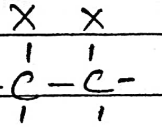
(a) When both the halogen atoms are attached to the same C-atom, these are called gem-dihalides. These are also called alkylidene dihalides.



gem-dihalide

CH_3CHCl_2
Ethylidene dichloride.
(1,1 die-chloro ethane)

(b) When the two halogen atoms are in adjacent C-atoms they are called Vicinal dihalides. These are also called alkylene dihalide.



vicinal dihalide.

CH_2-CH_2
$Cl \quad Cl$
Ethylene dichloride.
(1,2 dichloro ethane)

(c) Poly methylene dihalide :-
When the same two halogen atoms are present on the

terminal Carbon atoms. They are called Polymethylene dihalide

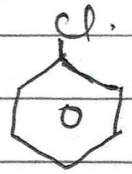
$BrCH_2CH_2CH_2Br$ — Trimethyl dibromide. (1,3 diebromo Propane)

$ClCH_2CH_2CH_2CH_2Cl$. — Tetramethyl dichloride. (1,4 dichloride butane)

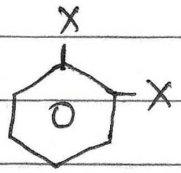
- Fully halogenated hydrocarbons are called Perhalohydrocarbons.

$CF_3-CF_2-CF_3$ — Perfluoropropane — octafluoro Propane.

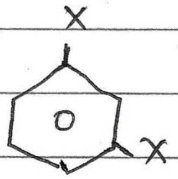
- Naming haloarenes (or aryl halides) :-
Haloarenes or aryl halides are named by adding the Prefix halo before the Name of the aromatic hydrocarbon.



chlorobenzene



ortho dihalobenzene.



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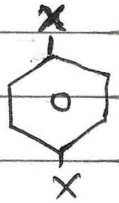

(Para)