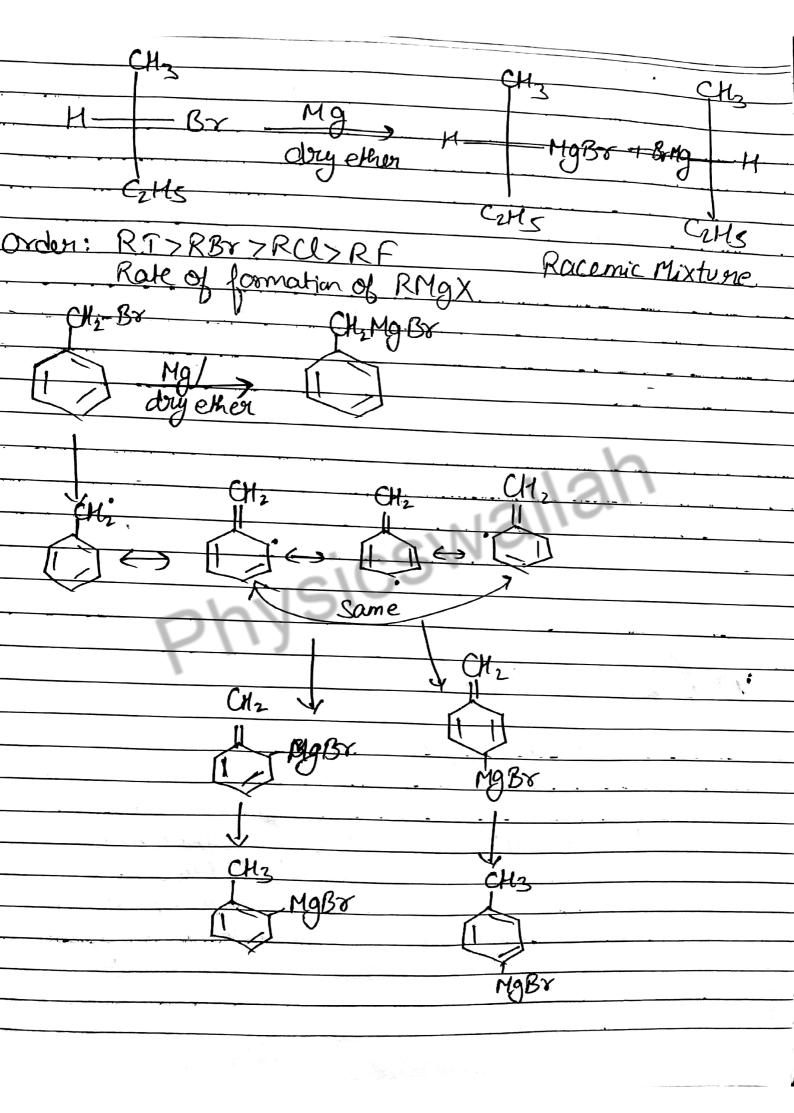
Haloalkanes & Halohrenes 07
Properties of HaloAlkanes 4
Reaction with Metals
(i) with Sodium (Na) - Westz Reaction
OV 1011
RX+2Na X-R dry > R-R+2Nax
Ascent of Chain
Della de
CH3-BY + 2Na+BY-CH3 dry CH3-CH3+ 2NaBY
ethane
4 10 1 7 10 7
CHG-Cl+2Na+ Cl-C, Us dory C2H5-C2H6+ 2Nacl
ether but ane
2 CH3-T 2Nal CH3-CH3+2NaT
Jost Complete Mechanism & Morre questions See Westz Reaction Video - Physics wallah Hydrocarbons 02 - Physics wallah Class 11th
Wixtz Deaction Video - Physical 2 1911
Hudrecont in an Object to the
MCOCOCOMBONS OS- Physics Wallah Class 11th
with Zinc (zn) - Frankland Reaction.
CH3-Cl+Zn+Cl-CH3 dry> CH3-CH3+ ZnCl
EMIN 5

P

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$C_{11}$ $C_{21}$ $C_{31}$ $C_{32}$ $C_{33}$ $C_{34}$ $C_{34}$ $C_{34}$ $C_{34}$ $C_{34}$
(iii) with Magnesium (Mg) - Formation of Grignard's Reagant.
Keagant. V
doug - Out in
RX + Mg dory RMgX  ether alkyl Magnesium halide
alkyl Magnesium halide
$\sigma$
CHCB8+Mg doy CMS-Mg-B8
CHEBO + Mg doy CMS-Mg-Bo ether Ethyl Magnesium toromide
Mechanism
1
$Mq \longrightarrow Mq + e^{-}$
$Mg \longrightarrow Mg + e^{-}$ $R - X = R + X^{-}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Solionic Solionic
Rala de la serie Soy Gratint
Role of day ether: prevents backward reaction
K-Mg X
por ether solvates
R-Mg X L Stabilises it
Stabilises it
which shifts meaching forward.
forward.
Note: R is a face Hadical -> Sp2 hybridised  so attack of Mgx can occur from  both sidel in case of chival centres
so attack of Mgx can occur from
both sidel in case of Chiral cent
- Times



(iv) with Lithium (Li)

RX+2Li dry R-Li+ LiX

ether

2R-Li+ LII --> R cubit LiT

R dialtyl

Lithium Cuprate

Guilman's Reagant

CH3-B8+ 21: day CH3-li+liB8

ethor.

CH3-li+ CUI — CH3

cH3-li+ hiI

cH3

cH3-li+ hiI

cH3

chile

dimethyl

Lithium

Cuperate.

Used in Correy house synthesis of alkanes

"Watch Hydrocarbons of physics Wallah for Correy house synthesis"