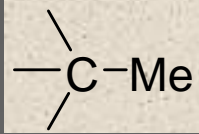
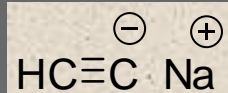


ORGANOMETALİK BİLEŞİKLER

Genel Formül: **R-Me** (Me=metal)

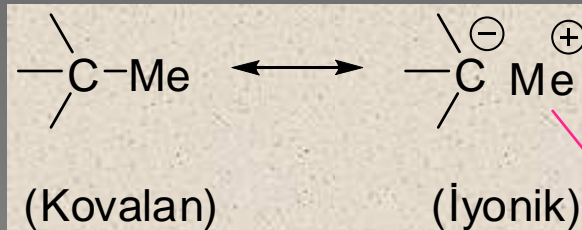
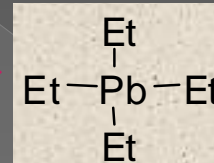
İçerdikleri  bağı:

%100 iyonik



%100 Kovalan

(Et)₄Pb



Bilinen en kuvvetli baz

ORGANOMETALİK BİLEŞİKLER

İyonik karakter:

%47

C-Na

%43

C-Li

%35

C-Mg

%22

C-Al

%18

C-Zn

%15

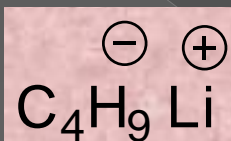
C-Cd

Çok reaktif, çok polar

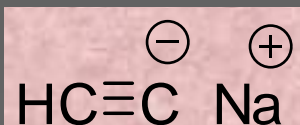
En çok kullanılan reaktifler

Daha az reaktif bileşikler

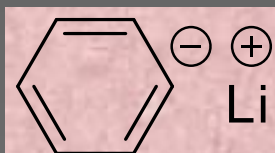
Adlandırma



Bütil lityum



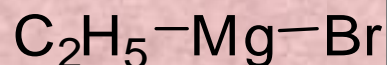
Sodyum asetilenür



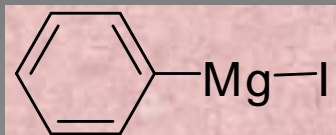
Fenil lityum



Alkil magnezyum halojenür



Etil magnezyum bromür



Fenil magnezyum iyodür

Elde Edilişleri

Çok reaktif maddelerdir. Saklama sorununu önlemek için çoğunlukla kullanılacakları zaman hazırlanabilirler:

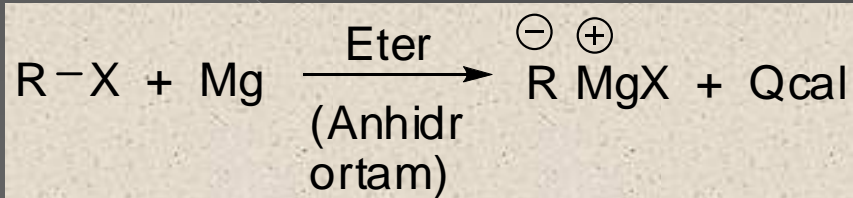
I) Hidrojen ve metal yer deęiştirmesi ile:



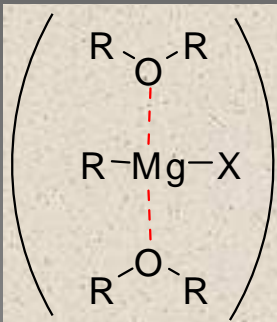
Elde Edilişleri

I) Halojenli türevlerden hareketle:

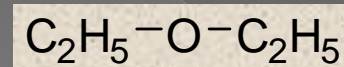
a)



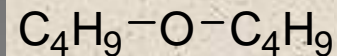
Susuz, kuru ortam ve N₂ atmosferi gerekli!!!
(Organomagnezyenler O₂, CO₂, H₂O ile parçalanırlar)



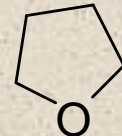
Organomagnezyenlerin stabilitesi, eteroksit çözücü içinde sağlanabilir.



Dietil eter

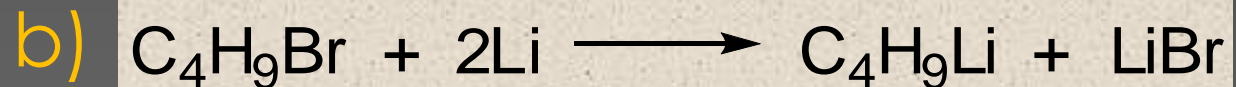


Dibütil eter



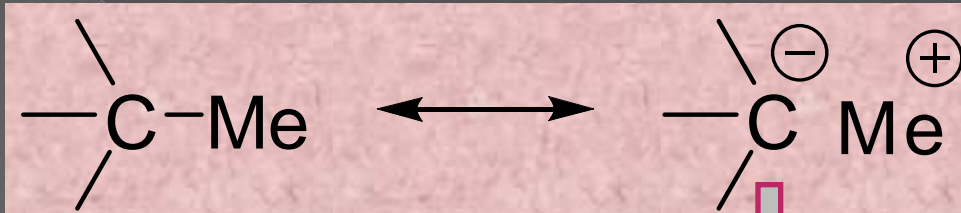
Tetrahidrofuran
(THF)

Elde Edilişleri

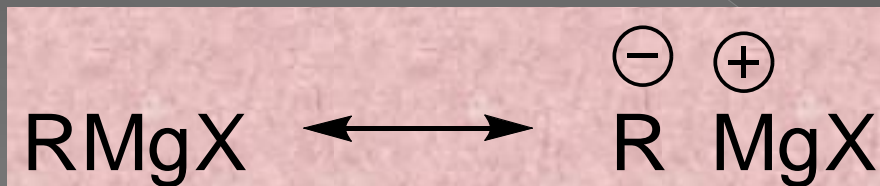


(Reformatsky)

Kimyasal özellikleri



Karbanyon



Kimyasal Özellikleri

I-Süstitüsyon reaksiyonlarına örnekler:

a) Mobil "H" ile süstitüsyon

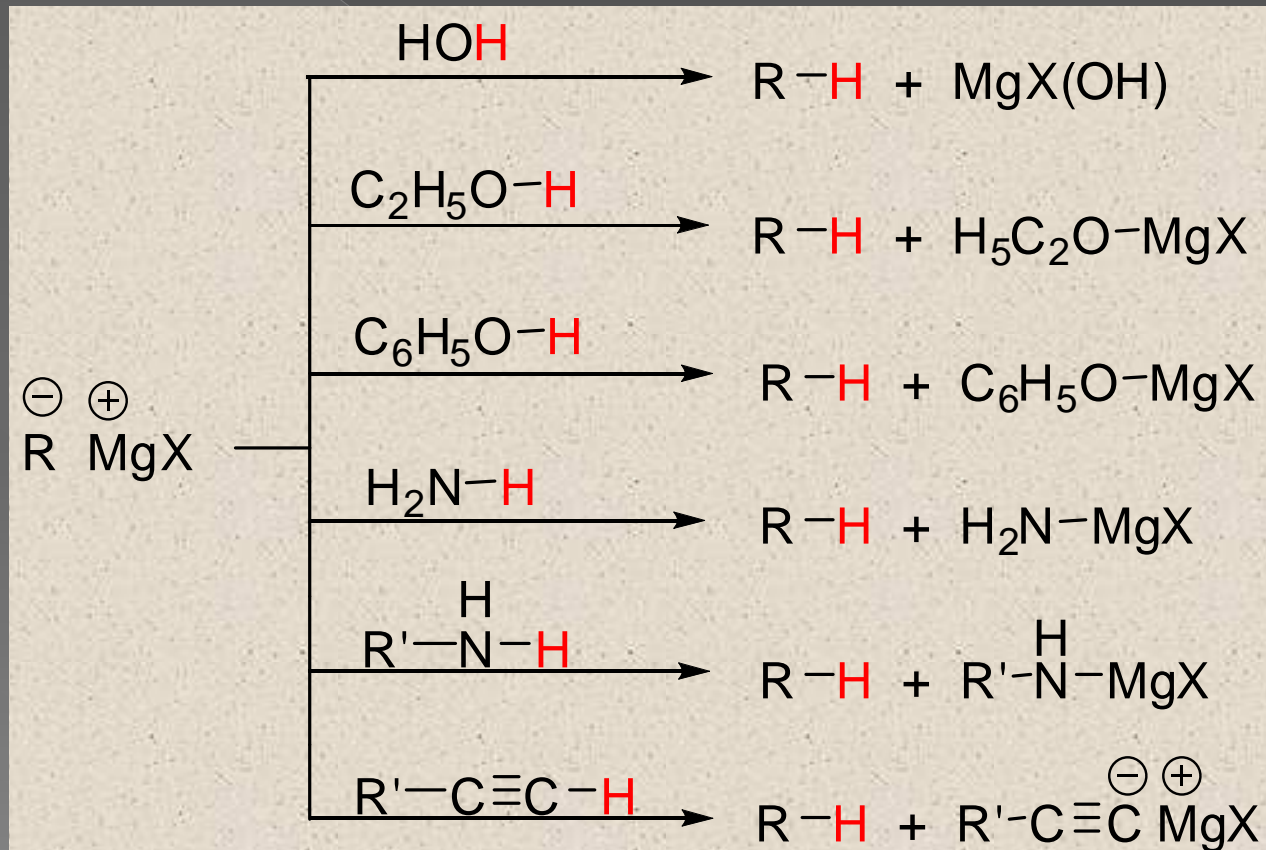


Metan (CH₄) gazının hacmi ölçülebilir

Aktif hidrojen miktar tayini

Kimyasal Özellikleri

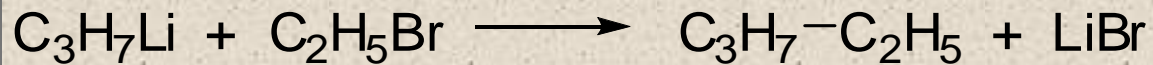
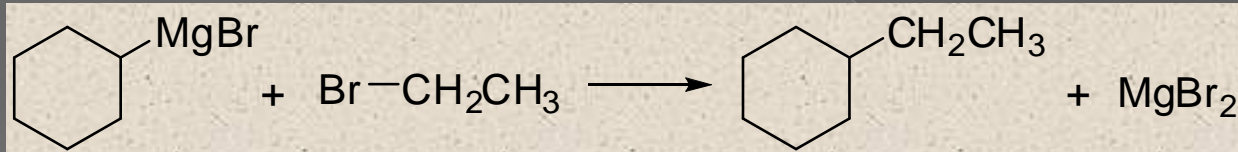
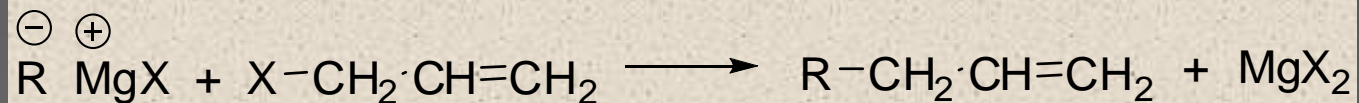
Aktif (mobil) hidrojen ile reaks. örnekleri:



(Zerevitinoff Reaks.)

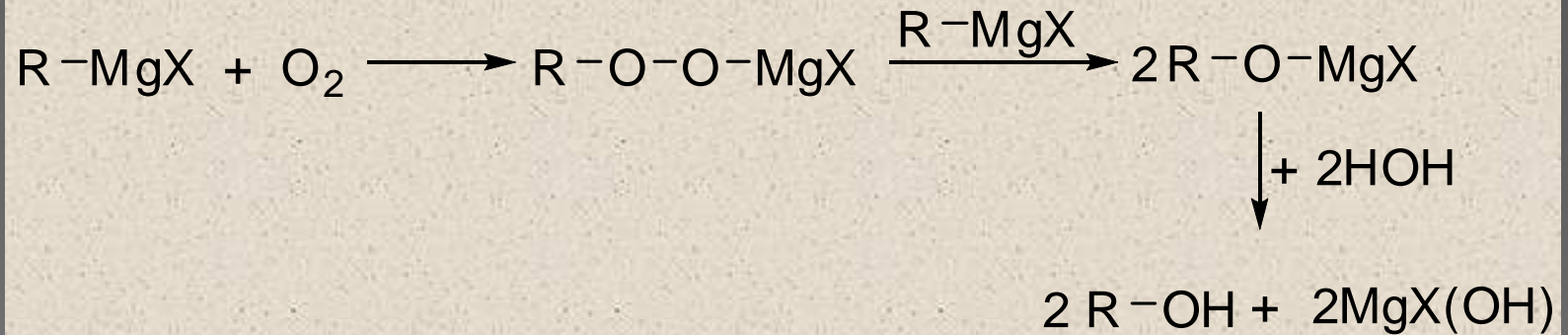
Kimyasal Özellikleri

b) Halojenli türevlerle reaksiyon



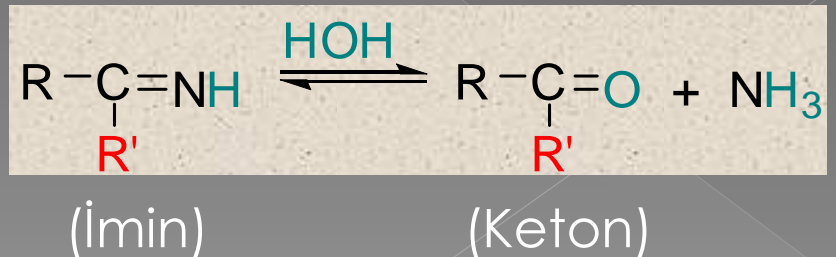
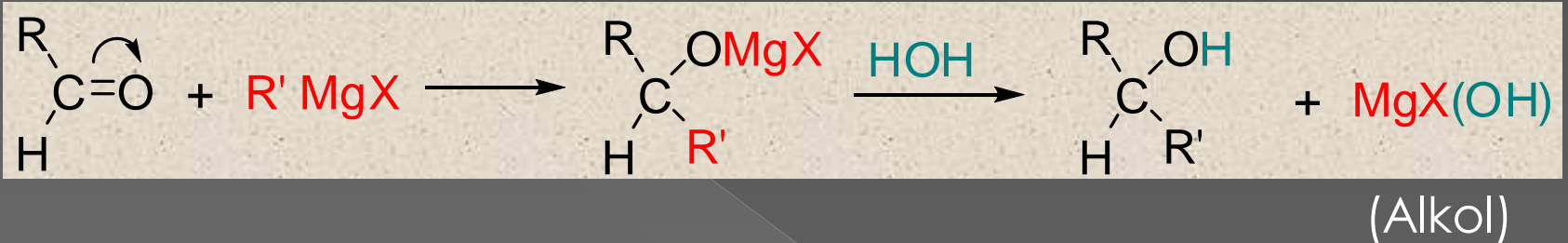
Kimyasal Özellikleri

c) O₂ ile Alkol Sentezi



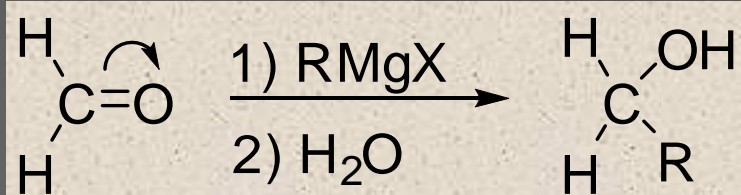
Kimyasal Özellikleri

II) Addisyon Reaksiyonları (Nükleofilik Addisyon)

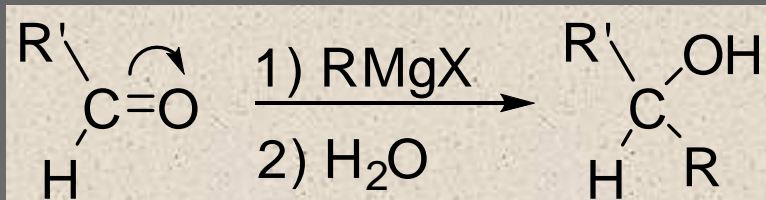


Kimyasal Özellikleri

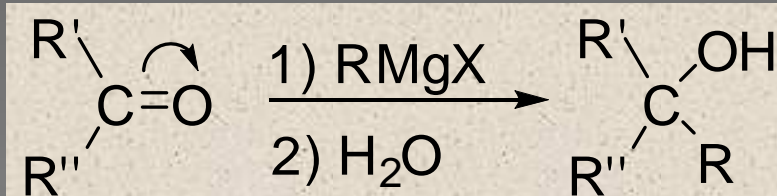
II) Addisyon Reaksiyonları (Nükleofilik Addisyon)



(Primer Alkol)



(Sekonder Alkol)

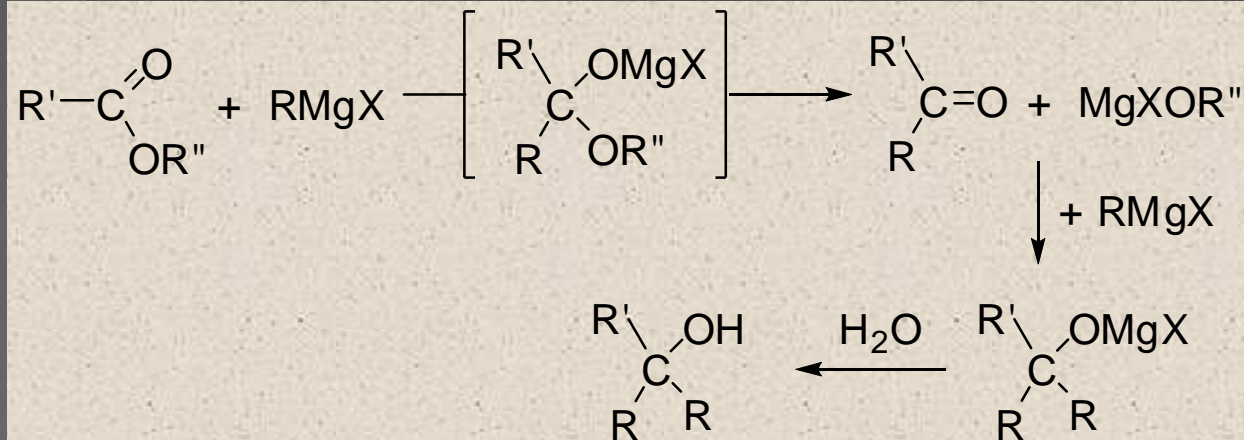


(Tersiyer Alkol)

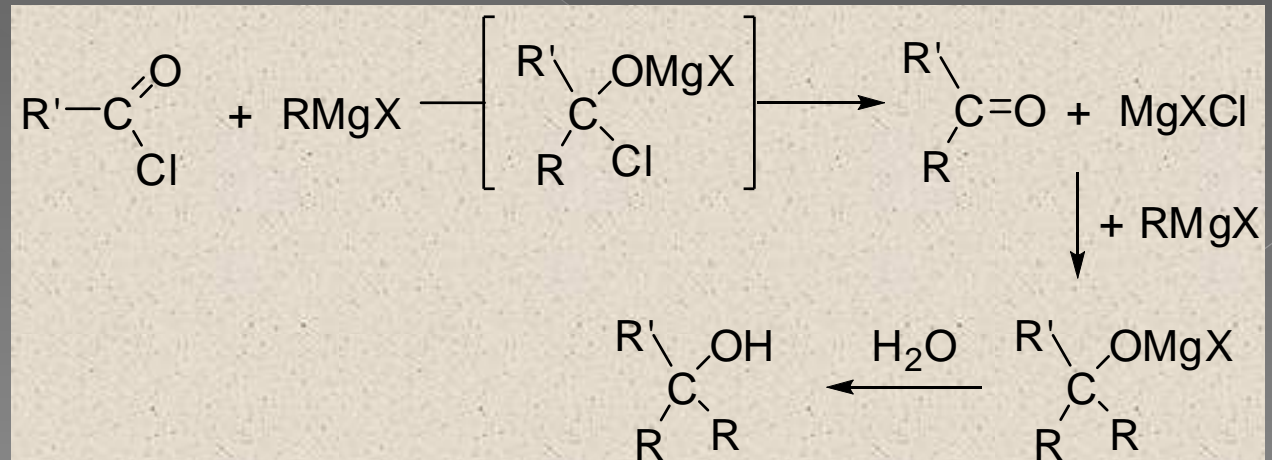
Kimyasal Özellikleri

II) Addisyon Reaksiyonları (Nükleofilik Addisyon)

Ester ile;



Açıl halojenürle;

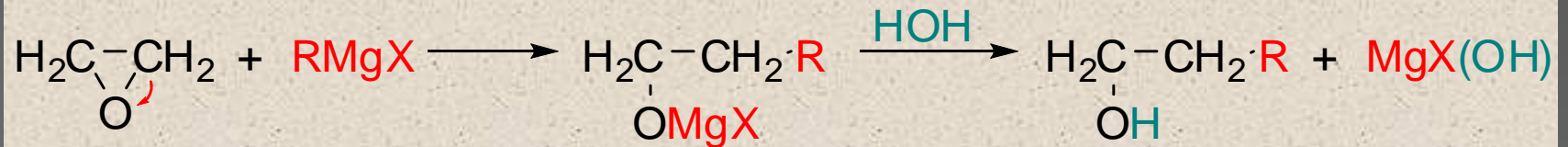


(Tersiyer alkol)



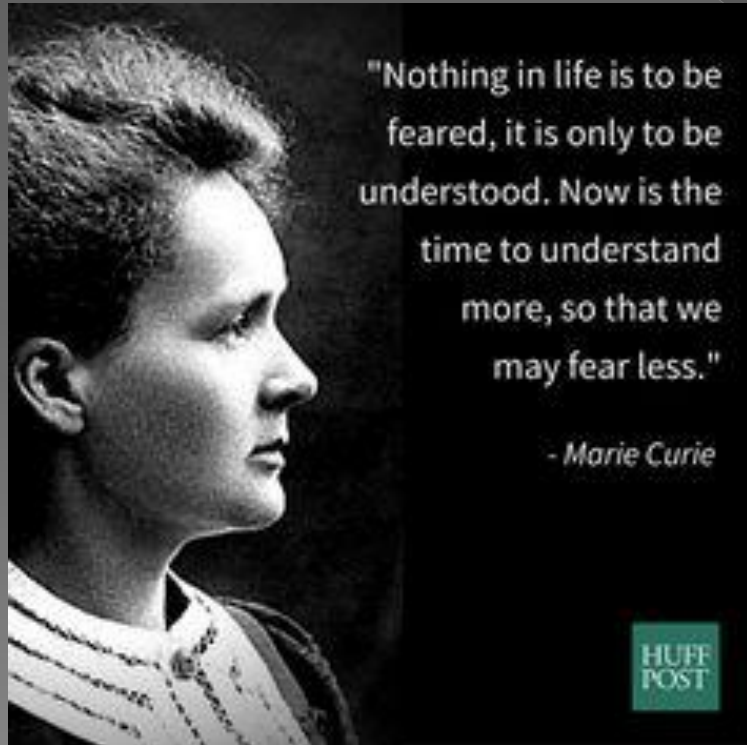
Kimyasal Özellikleri

II) Addisyon Reaksiyonları (Nükleofilik Addisyon)

Oksiran (Epoksit) Halkasına addisyon;



Hayatta başarılar....



"For the greatest benefit to mankind"
Alfred Nobel

**2015 NOBEL PRIZE
IN CHEMISTRY**

"for mechanistic studies of DNA repair"

**Aziz
Sancar**

Prize share 1/3

Born: 1946 in Savur, Turkey

#NobelFacts Thousands of spontaneous changes to a cell's genome occur on a daily basis


 **Nobelprize.org**
The Official Web Site of the Nobel Prize

ILLUSTRATION: MIA ADELINER/RED