

Pyrophoric Lab Chemicals

Aluminum alkyls: R_3Al , R_2AlCl , $RAICl_2$
Examples: Et_3Al , Et_2AlCl , $EtAlCl_2$, Me_3Al , Diethylethoxyaluminium

Grignard Reagents: $RMgX$ (R=alkyl, aryl, vinyl X=halogen)

Lithium Reagents: RLi (R = alkyls, aryls, vinyls)
Examples: Butyllithium, Isobutyllithium, sec-Butyllithium, tert-Butyllithium, Ethyllithium, Hexyllithium, Isopropyllithium, Methyllithium, (Trimethylsilyl)methyllithium, Phenyllithium, 2-Thienyllithium, Vinylithium, Lithium acetylide ethylenediamine complex, Lithium (trimethylsilyl)acetylide, Lithium phenylacetylide

Zinc Alkyl Reagents: $RZnX$, R_2Zn
Examples: Et_2Zn

Metal carbonyls: Lithium carbonyl, Nickel tetracarbonyl, Dicobalt octacarbonyl

Metal powders (finely divided): Bismuth, Calcium, Cobalt, Hafnium, Iron, Magnesium, Titanium, Uranium, Zinc, Zirconium

Low Valent Metals: Titanium dichloride

Metal hydrides: Potassium Hydride, Sodium hydride, Lithium Aluminum Hydride, Diethylaluminium hydride, Diisobutylaluminum hydride, Dichloro(methyl)silane

Nonmetal hydrides: Arsine, Boranes, Diethylarsine, diethylphosphine, Germane, Phosphine, phenylphosphine, Silane, Methanetellurol (CH_3TeH)

Non-metal alkyls: R_3B , R_3P , R_3As ; Tetramethylsilane, Tributylphosphine

Used hydrogenation catalysts: Raney nickel, Palladium, Platinum

Activated Copper fuel cell catalysts, e.g. $Cu/ZnO/Al_2O_3$

Finely Divided Iron Sulfides (FeS , FeS_2 , Fe_3S_4), and Potassium Sulfide (K_2S),

Elements:

- Phosphorus
- Cesium
- Lithium
- Potassium
- Sodium
- Sodium Potassium Alloy (NaK)
- Aluminum Phosphide (AlP)