

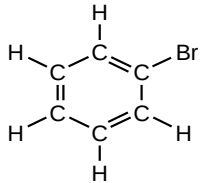
ĐỀ CƯƠNG ÔN TẬP HỌC KỲ 2

HÓA HỌC 9

Họ và tên:.....

Lớp:.....

HIDROCARBON

	METAN CTPT: CH ₄	ETILEN CTPT: C ₂ H ₄	AXETILEN CTPT: C ₂ H ₂	BENZEN CTPT: C ₆ H ₆
Công thức cấu tạo	$\begin{array}{c} \text{H} \\ \\ \text{H} - \text{C} - \text{H} \\ \\ \text{H} \end{array}$ Thu gọn: CH ₄	$\begin{array}{c} \text{H} \quad \quad \text{H} \\ \diagdown \quad \diagup \\ \text{C} = \text{C} \\ \diagup \quad \diagdown \\ \text{H} \quad \quad \text{H} \end{array}$ Thu gọn: CH ₂ = CH ₂	$\text{H} - \text{C} \equiv \text{C} - \text{H}$ Thu gọn: CH ≡ CH	 Thu gọn: 
Phản ứng cháy	$\text{CH}_4 + 2\text{O}_2 \xrightarrow{t^\circ} \text{CO}_2\uparrow + 2\text{H}_2\text{O}$	$\text{C}_2\text{H}_4 + 3\text{O}_2 \xrightarrow{t^\circ} 2\text{CO}_2\uparrow + 2\text{H}_2\text{O}$	$2\text{C}_2\text{H}_2 + 5\text{O}_2 \xrightarrow{t^\circ} 4\text{CO}_2\uparrow + 2\text{H}_2\text{O}$	$2\text{C}_6\text{H}_6 + 15\text{O}_2 \xrightarrow{t^\circ} 12\text{CO}_2\uparrow + 6\text{H}_2\text{O}$
Phản ứng thế	$\text{CH}_4 + \text{Cl}_2 \xrightarrow{as} \text{CH}_3\text{Cl} + \text{HCl}\uparrow$ metyl clorua			$\text{C}_6\text{H}_6 + \text{Br}_2 \text{ (lỏng)} \xrightarrow{\text{Fe}, t^\circ} \text{C}_6\text{H}_5\text{Br} + \text{HBr}\uparrow$ (brombenzen)
Phản ứng cộng		$\text{C}_2\text{H}_4 + \text{Br}_2 \text{ (dd)} \longrightarrow \text{C}_2\text{H}_4\text{Br}_2$ (dibrometan)	$\text{C}_2\text{H}_2 + 2\text{Br}_2 \text{ (dd)} \longrightarrow \text{C}_2\text{H}_2\text{Br}_4$ (tetrabrometan)	$\text{C}_6\text{H}_6 + 3\text{H}_2 \xrightarrow{\text{Ni}, t^\circ} \text{C}_6\text{H}_{12}$ (xiclohexan)
Phản ứng trùng hợp		$n\text{CH}_2 = \text{CH}_2 \xrightarrow{xt, t^\circ, p} (-\text{CH}_2-\text{CH}_2-)_n$ (polietilen) (PE)		
Điều chế	$\text{CH}_3\text{COONa} + \text{NaOH}$ natri axetat $\xrightarrow[t^\circ]{\text{CaO}} \text{CH}_4\uparrow + \text{Na}_2\text{CO}_3$	$\text{C}_2\text{H}_5\text{OH} \xrightarrow[170^\circ \text{C}]{\text{H}_2\text{SO}_4} \text{C}_2\text{H}_4 + \text{H}_2\text{O}$ rượu etylic, ancol etylic, etanol	$\blacklozenge \text{CaC}_2 + 2\text{H}_2\text{O} \longrightarrow \text{C}_2\text{H}_2\uparrow + \text{Ca(OH)}_2$ canxi cacbua (đất đèn) $\blacklozenge \text{C}_2\text{H}_2 + \text{H}_2 \xrightarrow[t^\circ]{\text{Pd}} \text{C}_2\text{H}_4$ $2\text{CH}_4 \xrightarrow[\ell n]{1500^\circ \text{C}} \text{C}_2\text{H}_2 + 3\text{H}_2$ metan	$3\text{C}_2\text{H}_2 \xrightarrow{\text{C}, 600^\circ \text{C}} \text{C}_6\text{H}_6$