

Chemguide – questions

ALKANES: COMBUSTION

1. Write equations for the complete combustion of
 - a) pentane, C_5H_{12}
 - b) ethane, C_2H_6
 - c) decane, $C_{10}H_{22}$
 - d) cyclohexane, C_6H_{12}
2. If you drop a lighted match onto some petrol (gasoline), it ignites almost explosively. If you drop a lighted match onto some tar on the road, almost certainly nothing will happen. Both contain alkanes, Explain the difference.
3.
 - a) Why does a bunsen burner with the air-hole closed produce a yellow flame?
 - b) Explain why carbon monoxide, formed by incomplete combustion of hydrocarbons, is poisonous.