

() : 1427/10/25 :



H = 1, C = 12, N = 14, O = 16, F = 19, Ne = 20.2, Na = 23, Cl = 35.5, K = 39.1, :
 S = 32, Cr = 52, Zn = 65.4, Br = 80, I = 127
 $N_A = 6.02 \times 10^{23}$, $R = 0.0821 \text{ atm L mol}^{-1} \text{ K}^{-1} = 8.314 \text{ J mol}^{-1} \text{ K}^{-1}$:

- 1
 T (°C) n () V (L) P (atm)
- 2
 273 () 0 () -121.5 () 15 ()
- 3
 () () () ()
- 4
 : (70°C) (3 atm) (g L⁻¹) O₂ ()
 3.41 () 1.01 () 6.08 () 34.0 ()
- 5
 :
 () () () ()
- 6
 F₂ 0.50 mol Ne 3.0 mol ()
 : F₂ Torr (440 Torr)
 220 () 440 () 73 () 63 ()

: O_2 F_2 (7)

(((((

STP Br_2 (8)

I_2 (F_2 (N_2 (O_2 ((9)

ZnSO_4 $\text{ZnSO}_4 \cdot n\text{H}_2\text{O}$ 1.0 g (9)

: n 0.561 g

7 (5 (4 (3 ((10)

: $\text{Cr}_2(\text{SO}_4)_3$ 9.8 g Cr (10)

4.5×10^{22} (3.0×10^{22} (1.5×10^{22} (1.5×10^{23} ((11)

: 1.71 g mL $\text{C}_{12}\text{H}_{22}\text{O}_{11}$ 0.05 M (11)

60 (80 (100 (120 ((12)

$\text{Na} + \text{O}_2 \longrightarrow \text{Na}_2\text{O}$:

Na 1.15 g Na_2O

: O_2

2.55 (3.15 (1.55 (2.30 ((13)

: 26.5% K, 35.4% Cr, 38.1% O (13)

$\text{K}_2\text{Cr}_2\text{O}_3$ (KCrO_3 (K_2CrO_7 ($\text{K}_2\text{Cr}_2\text{O}_7$ ((14)

825 g (14)

: 20%

308 (206 (350 (175 ((15)

36% 64% (CH_3OH) (15)

: :

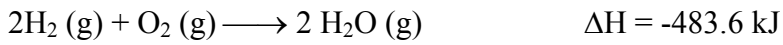
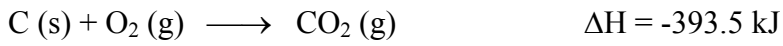
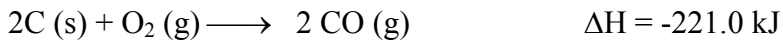
0.50 (0.40 (0.32 (0.64 ((16)

$$: \quad \text{J/Pa} \quad \text{J} \quad (16)$$

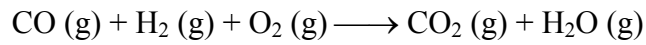
$$\text{m}^2 \cdot \text{s}^{-2} (\quad \text{m}^3 (\quad \text{m}^2 (\quad \text{m} \cdot \text{s}^{-2} ($$



: (17)



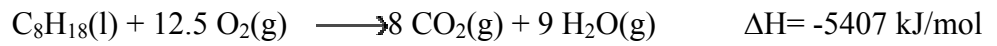
ΔH



$$-382.5 (\quad -524.8 (\quad -262.2 (\quad -614.9 ($$



: (18)



	$\text{CO}_2(\text{g})$	$\text{H}_2\text{O}(\text{g})$
$\Delta\text{H}^\circ_f (\text{kJ/mol})$	-394	-242

: $\text{C}_8\text{H}_{18}(\text{l})$

$$+5407 (\quad -319 (\quad -477 (\quad +77 ($$



(2.1 J/kg) \quad 5 g \quad (J) \quad (19)

$$315 (\quad 63 (\quad 10.5 (\quad 0.35 ($$



(20)

: (kJ) \quad 8 g

$$206.05 (\quad 328.9 (\quad 274.5 (\quad 824.2 ($$

