

3 54

1.

2.

3.

4.

5.

6.

7.

2

2

3 4 2 3

2 +2 2 2 +2 -+ 2

2

2⁺+2 -+2 ++ 4²⁻ 4 +2 2

2 3⁺+ =3 2⁺

2 2

1

2

1

2

2

+

1

2

3N 1

2 1

2⁺ 1

2²

2N 1

2

2

2N 3N

4.48 3

2

$$\frac{4.48}{22.4 /}$$

0.2

0.2 N

0.1 N

4⁻

$$\frac{(+)}{(-)} = 1 \cdot 10^{-11}$$

4⁺

+

3

2⁺

2

() 3

2

7 2

2 2 5² 4 4 2

2₌₌₌

2

2

CO () + H₂O () CO () + H₂

!

2

1

11.

2 2 ⇌ 2 4 0

3 □

3

3

5 0.01 1 1 3

5 0.01 1 1

È

3

0.01 1 1

K () K ()

KT

12.

□

0.8

1.2

0 2

0.3 mol · L⁻¹ · min⁻¹

⊗

0.5 0.8 0.8

0.25 1 1 0.4 1 1 0.4

1 1

=10

13.

2 催化剂 2+ 2

2 10 4 2
 2 3 2 4 - 2
 2 2+5 2+6 2 =5 2 +12 +2 -

200 1 2 $\frac{0.2g}{67.5g/mol} = 0.00296$ 1 2 $2.96 \cdot 10^{-3}$

-1 $2.96 \cdot 10^{-3}$
 -1

20. 14

1 1 1 1
 2 2 1

3 1 $\frac{40}{233}$ 2 1

3 1 1 1

4 1 4 强热 + 3 2

1 70 -80

2 $\frac{2-}{4}$ 2

4 2

3

2

4 4 (4) = (4) = $\frac{40}{233}$

(4) = $\frac{n}{V} = \frac{\frac{w}{233}}{25 \cdot 10^{-3}}$ -1 = $\frac{40}{233}$ 1

4

4 (4)

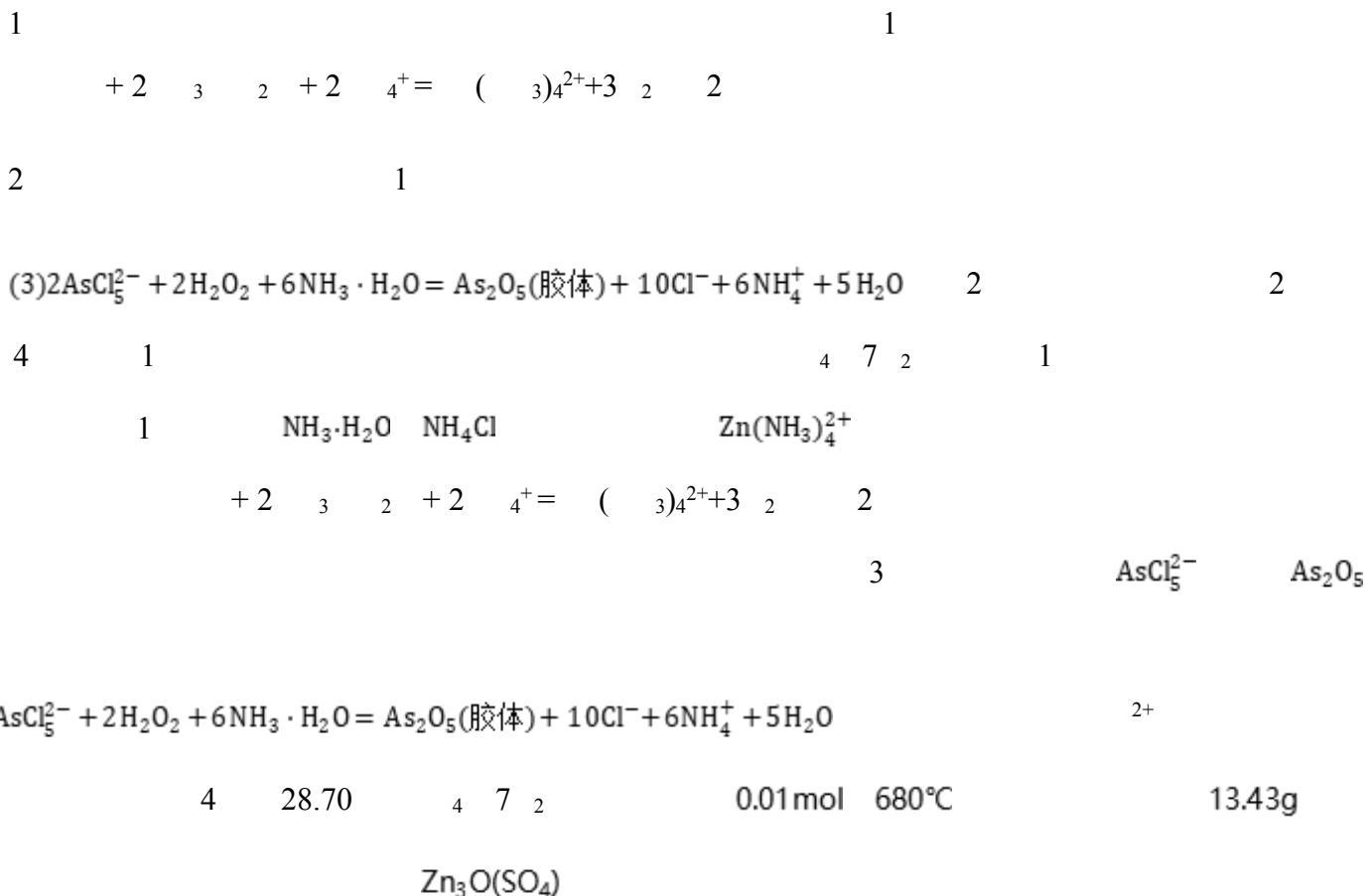
3

4

4 5 2

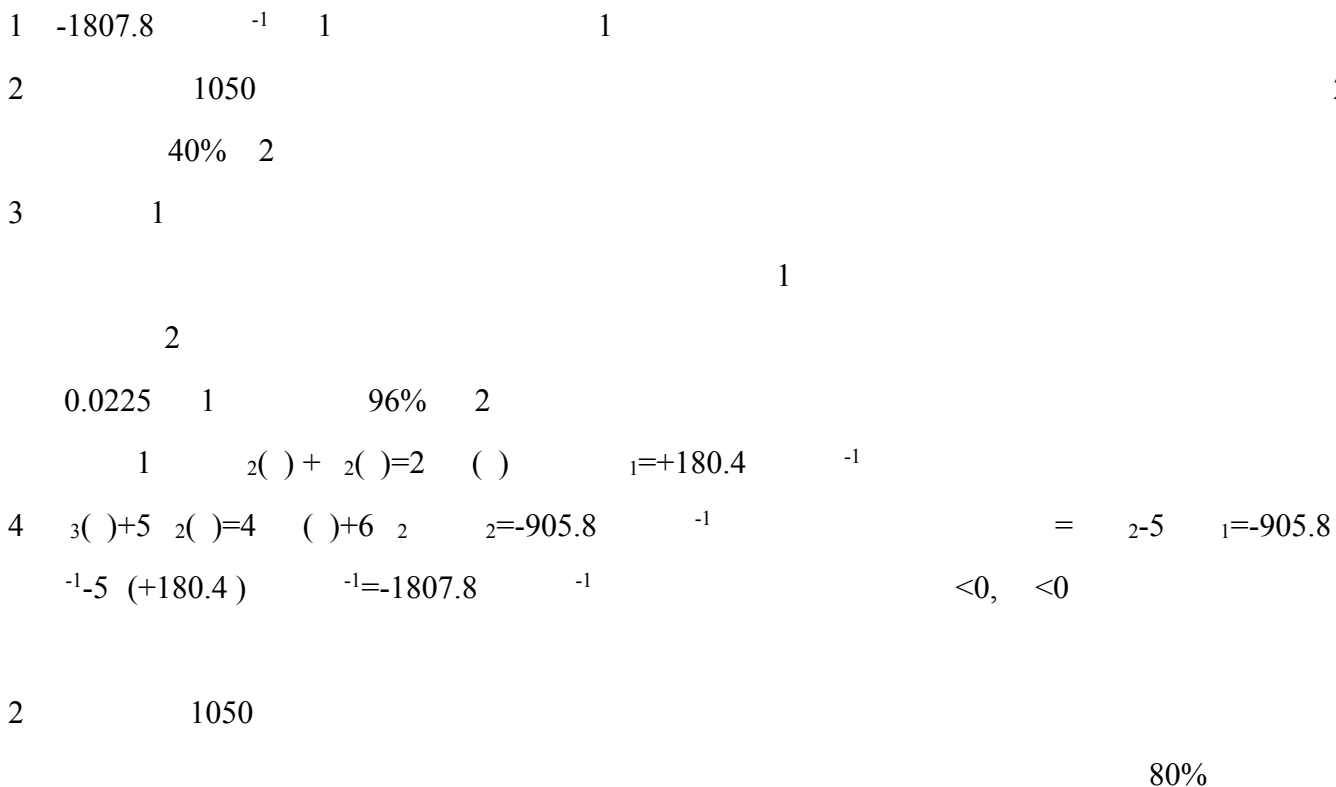
4

21. 10



4 7 2

22. 13



$()+2 \quad ()\Leftarrow \quad ()+ \quad {}_2()$

1

0.8

0.4

0.4

0.4

0.2

+0.4

0.4

100%

40%

3

/

2

/ &

2

3 /

/

2

3 /

% -

60%

2