



本电子版为发布稿。请以中国环境出版集团出版的正式标准文本为准。

	.....	ii
1	.....	1
2	.....	1
3	.....	1
4	.....	2
5	.....	3
6	.....	5
7	.....	7
8	.....	12
9	.....	13

2018 12 29
2019 7 1

“ ”

GB 3836.1

GB/T 4208

IP

GB/T 16157

HJ 38

HJ 168

HJ 604

-

HJ 38 HJ 604

HJ 38 HJ 604

/

5.1.4

5.2.4.1

/

/

5.2.4.2

5.2.4.3

5.2.4.5

5.2.1

5.2.2

5.2.3

5.2.4

120

20

GB/T 4208

IP55

GB3836.1

30 kg

- a) 0 40
- b) 85%
- c) 80 106 kPa
- d) AC 220± 22 V 50± 1 Hz DC 24 V

15 35 85%
20 MΩ

15 35 85% 1500 V 50 Hz
1 min

20

120

5 μm

120

20

0.5 1 μm

/

/

10%

/

0.13 $\mu\text{mol/mol}$ 0.07 mg/m^3

2.0%

$\pm 2.0\%$

80% 120%

2 min

0 40

$\pm 5.0\%$

$\pm 10\%$

$\pm 2.0\%$

$\pm 5.0\%$

VOCs

1

1		0.9 1.2
2		0.8 1.2
3		0.8 1.2
4		0.75 1.15

2

5.0%

95%

1.49 $\mu\text{mol/mol}$ 0.8 mg/m^3

2.0%

$\pm 2.0\%$

80% 120%

2 min

0 40

± 5.0%

± 10%

± 2.0%

± 10%

± 2.0%

± 2.0%

± 5.0%

VOCs

1

2

5.0%

95%

2

2

20 mg/m³

200 mg/m³

2.0%
0.3 mg/m³

1

$$S_0 = \sqrt{\frac{\sum_{i=1}^n (X_i - \bar{X})^2}{n-1}} \quad \dots\dots\dots 1$$

S_0 — $\mu\text{mol/mol}$ mg/m^3
 X_i — i $\mu\text{mol/mol}$ mg/m^3
 \bar{X} — n $\mu\text{mol/mol}$ mg/m^3
 i — $i=1$ 7
 n — $n=7$
 2 R_{DL}

6.1.1.1 6.2.1.1

$$R_{DL} = 3.143 S_0 \quad \dots\dots\dots 2$$

R_{DL} — $\mu\text{mol/mol}$ mg/m^3
 S_0 — $\mu\text{mol/mol}$ mg/m^3
 3.143 — 7 99% t

6.1.1.2 6.2.1.2

50% ± 5%

C_i 6 3
6.1.1.3 6.2.1.3

$$S_r = \frac{1}{C} \times \sqrt{\frac{\sum_{i=1}^n (C_i - \bar{C})^2}{n-1}} \times 100\% \quad \dots\dots\dots 3$$

S_r — — %
 C_i — —

- d) 0 ± 2 30 min t_3
 M_3
e) 20 ± 2 30 min t_4
 M_4
f) 5

6.1.2.2 6.2.2.2

$$b_{sr} = \frac{(M_3 - Z_3) - \frac{(M_2 - Z_2) + (M_4 - Z_4)}{2}}{R} \times 100\% \quad \frac{(M_1 - Z_1) - \frac{(M_0 - Z_0) + (M_2 - Z_2)}{2}}{R} \times 100\% \dots 5$$

b_{sr} -----		%	
M_0 -----	t_0		$\mu\text{mol/mol}$ mg/m^3
M_1 -----	t_1		$\mu\text{mol/mol}$ mg/m^3
M_2 -----	t_2		$\mu\text{mol/mol}$ mg/m^3
M_3 -----	t_3		$\mu\text{mol/mol}$ mg/m^3
M_4 -----	t_4		$\mu\text{mol/mol}$ mg/m^3
Z_0 -----	t_0	$\mu\text{mol/mol}$	mg/m^3
Z_1 -----	t_1	$\mu\text{mol/mol}$	mg/m^3
Z_2 -----	t_2	$\mu\text{mol/mol}$	mg/m^3
Z_3 -----	t_3	$\mu\text{mol/mol}$	mg/m^3
Z_4 -----	t_4	$\mu\text{mol/mol}$	mg/m^3
R -----		$\mu\text{mol/mol}$	mg/m^3

50%± 5%

T 10%

P

10%

Q

6

3

6.2.2.3

$$V = \frac{P - T}{R} \times 100\% \quad \frac{Q - T}{R} \times 100\% \dots 6$$

V ——		%	
T ——			$\mu\text{mol/mol}$ mg/m^3
P ——		10%	$\mu\text{mol/mol}$ mg/m^3
Q ——		10%	$\mu\text{mol/mol}$ mg/m^3
R ——		$\mu\text{mol/mol}$	mg/m^3

				50%± 5%	
	<i>W</i>			10%	
		<i>X</i>			10%
			<i>Y</i>	7	
3				6.1.2.3	6.2.2.4
		$U = \frac{X-W}{R} \times 100\%$		$\frac{Y-W}{R} \times 100\%$	..... 7
<i>U</i> —				%	
<i>W</i> —				μmol/mol	mg/m ³
<i>X</i> —		10%		μmol/mol	mg/m ³
<i>Y</i> —		10%		μmol/mol	mg/m ³
<i>R</i> —		μmol/mol	mg/m ³		

				50%± 5%	
	0.15 mm			<i>M</i> ₀	
				10-55-10	Hz
		1	/min		10 min
		2 h			<i>M</i> ₁
3				8	
6.2.2.5					..... 8
		$u_c = \frac{\bar{M} - M_0}{R} \times 100\%$			
<i>u</i> _c —				%	
<i>M</i> ₀ —				μmol/mol	mg/m ³
\bar{M} —		<i>f</i>		μmol/mol	mg/m ³
<i>R</i> —		μmol/mol	mg/m ³		

- a) *a*₀
- b) 90% +10% *a*₁
- c) 80% +20% *a*₂

a) + 22.4 μmol/mol 16 mg/m³ 224 μmol/mol
160 mg/m³ *b*₀

b)	90%	+	10%	+	22.4 μmol/mol	16 mg/m ³				
	224 μmol/mol		160 mg/m ³				<i>b</i> ₁			
c)	80%	+	20%	+	22.4 μmol/mol	16 mg/m ³				
	224 μmol/mol		160 mg/m ³				<i>b</i> ₂			
	<i>a</i> ₁	<i>a</i> ₂			<i>a</i> ₀		<i>b</i> ₀			
			<i>b</i> ₁	<i>b</i> ₂			<i>a</i> ₁	<i>a</i> ₂	<i>b</i> ₁	<i>b</i> ₂
		3			<i>a</i> _{<i>i</i>}	<i>b</i> _{<i>i</i>}			9	

6.1.2.4 6.2.2.6

$$IE_i = \frac{\bar{a}_i - \bar{a}_0}{R} \times 100\% \qquad IE_i = \frac{\bar{b}_i - \bar{b}_0}{R} \times 100\% \qquad \dots\dots\dots 9$$

<i>IE</i> _{<i>i</i>}	—				%
<i>a</i> ₀	<i>a</i> _{<i>i</i>}	—	<i>i</i>	3	μmol/mol mg/m ³
<i>b</i> ₀	<i>b</i> _{<i>i</i>}	—	<i>i</i>	3	μmol/mol mg/m ³
<i>R</i>	—				μmol/mol mg/m ³
<i>i</i>	—			<i>i</i> =1 2	

10

6.1.2.5 6.2.2.7

$$f_c = \frac{\frac{S_i}{C_{c,i}}}{\frac{S_{ref}}{C_{c,ref}}} \qquad \dots\dots\dots 10$$

<i>f</i> _{<i>c</i>}	—		
<i>S</i> _{<i>i</i>}	—	<i>i</i>	
<i>S</i> _{ref}	—		
<i>C</i> _{<i>c,i</i>}	—	<i>i</i>	μmol/mol mg/m ³
<i>C</i> _{<i>c,ref</i>}	—		μmol/mol mg/m ³

20%	30%		40%	60%		80%	90%	3
								11

6.1.2.6 6.2.2.8

$$P_j = \frac{1}{C_j} \times \sqrt{\frac{\sum_{i=1}^2 (C_{i,j} - \bar{C}_j)^2}{1}} \times 100\% \quad \dots\dots\dots 11$$

_____ j %
 _____ j $\mu\text{mol/mol}$ mg/m^3
 $C_{i,j}$ _____ i j $\mu\text{mol/mol}$ mg/m^3
 _____ $i=1$ 2
 _____ $j=1$ 3

				7.3.2
		2.0%	2.0%	7.3.3
		± 2.0% F.S.	± 2.0% F.S.	7.3.4
		80% 120%	80% 120%	7.3.5
		2 min	2 min	7.3.6
		± 5.0% F.S.	± 5.0% F.S.	7.3.7
		/	± 2.0% F.S.	7.3.8
		± 2.0% F.S.	± 2.0% F.S.	7.3.9
		/	± 2.0% F.S.	7.3.10
		± 5.0% F.S.	± 5.0% F.S.	7.3.11
		0.9 1.2	0.9 1.2	7.3.12
		0.8 1.2	0.8 1.2	
		0.8 1.2	0.8 1.2	
		0.75 1.15	0.75 1.15	
		5.0%	5.0%	7.3.13
		95%	95%	7.3.14