

DB44

Emission standard of volatile organic compounds for container manufacturing

			ii
1.			1
2.			1
3.			1
4.			2
5.			2
6.			3
7.			4
A		VOCs	5
B		VOCs	6
C	VOCs		7

Volatile Organic Compounds VOCs

GB/T1.1-2009

2016 2 4

1.

2.

GB/T 1413 1
GB/T 16157
GB 16297
GB 50325
JH/T E01
HJ/T 1
HJ/T 55
HJ/T 397
HJ 583
HJ 584
HJ 732
HJ 734

-
/
-
- / -
28

3.

3.1

freight container

a)
b)
c)
d)
e) 1m³ 35.3ft³

[GB/T 1413, 3.1]

3.2

3.3

3.4

273.15 K 101325 Pa

3.5

VOCs

3.6

3.7

HJ/T 55

1 h

3.8

emission pipe height

[GB 16297, 3.10]

4.

4.1

4.2

2017 6 30

2017 7 1

5.

5.1

VOCs

VOCs

1

1

VOCs

 g/m^2

	200	110

5.2 VOCs

2

2 VOCs

mg/m³

	1	1
	40	20
VOCs	150	90

5.3

3

3

mg/m³

			VOCs
0.1	1.8	1.0	3.0

5.4

15 m

200 m

5 m

6.

6.1

6.1.1 VOCs

GB/T 16157

6.1.2 HJ/T 55

6.2

6.2.1

HJ/T 1

GB/T 16157

6.2.2 GB/T 16157 HJ/T 397 HJ 732 HJ 734

6.2.3 VOCs 1 h

6.3

6.3.1

75%

6.3.2

6.3.3

VOCs

7.

7.1

7.2

VOCs

A

VOCs

A.1

JH/T E01

A.2

VOCs

A.3

VOCs

VOCs

A.4

A.5

A.6

VOCs

VOCs

A.7

B

VOCs

VOCs

1 VOCs

2

3 VOCs

4 VOCs

5 VOCs

6

B

VOCs

B.1 VOCs VOCs

B.2 m^2 $2 \times$ TEU (kg)/ (m) $\times$ B1 (kg/m³) (B1)

VOCs VOCs I O_1 O_2 B2 (B2)

I 料 VOCs kg
 O_1 VOCs kg
 O_2 VOCs kg

B.3 VOCs VOCs g/m² = VOCs g/m² B5 (B3)

C

VOCs

C.1

VOCs

VOCs

C.2

C.2.1

1 EPA Method TO-17

2 GB/T 16157

3

2010

G

TVOC

C.2.2

C.2.2.1 VOCs

VOCs

1)

2)

C.2.2.2 C.1

C.2.2.3

C.3

C.1 VOCs

	/ -	HJ 583
	/ -	HJ 584
	- / -	HJ 734
VOCs		C ^a
a		

C.2.3

VOCs 80%

C.2

C.2

VOCs

	.

C.3

C.3.1

0.01mg/m³

C.3.2

C.3.2.1 GB/T 16157

C.3.2.2

C.3.2.3 /

C.3.2.4

a)

b)

c)

2 3%

C.3.3

/

a)

b)

c)

C.3.4

C.3.4.1

C.3.4.2

GB/T 16157 C.4.6

C.4 VOCs

C.4.1

FID ECD MSD

C.4.2

C.4.2.1

C.4.2.2

C.4.2.3

C.4.3

C.4.3.1

C.4.3.2

C.4.3.3 HP-VOC

C.4.3.4 0 0.5L/min

C.4.3.5

C.4.3.6 GB/T 16157 9.3.5

C.4.3.7

C.4.3.8

C.4.4

C.4.4.1

C.4.4.1.1

C.4.4.1.2

C.4.4.2

GB/T

16157

C.4.4.3

C.4.5

C.4.5.1

C.4.5.2

C.4.5.3

5

C.4.5.4

C.4.5.5

C.4.5.5.1 C1

$$C_c = \frac{m_i - m_o}{V_{nd} R}$$

C_c mg/m³

m_i i

m_o i

V_{nd} L

R %

C.4.5.5.2 C2 VOCs

$$C_{\text{VOC}} = \sum_{i=1}^{i=n} C_c$$

C_{VOC}	VOCs	mg/m ³
1		
2		