



## TVOC TEST REPORT

Issue number	Y5CZ-2GN8-JP7M
Item	Special purpose coating agent
Product Name	X10
Product Use	Multi coating solution for surface
Type	Liquid type
Volume	1L

### The emission of volatile organic compounds from samples of building products and furnishing

Item	Unit	Limit of Quantification	Criterion	Result
Total Volatile Organic Compounds	mg/m <sup>3</sup>	0.001	Less than 0.1	Less than 0.001
Benzene	mg/m <sup>3</sup>	0.001	-	Less than 0.001
Toluene	mg/m <sup>3</sup>	0.001	-	Less than 0.001
Ethyl benzene	mg/m <sup>3</sup>	0.001	-	Less than 0.001
Xylene	mg/m <sup>3</sup>	0.001	-	Less than 0.001
Styrene	mg/m <sup>3</sup>	0.001	-	Less than 0.001
Formaldehyde	mg/m <sup>3</sup>	0.001	-	Less than 0.001
Acetaldehyde	mg/m <sup>3</sup>	0.001	-	Less than 0.001

NOTE) · mg/m<sup>3</sup> · h : Area specific air flow rate(EFa)  
· Test Details

Item	Details	
Test Temperature & Relative humidity	Temperature(°C) : (25.0 ± 0.2)	
	Relative humidity (%) : (50 ± 1)	
Surface Area & Product loading factor	Surface Area of Test sample(m <sup>2</sup> ) : 0.040 6	
	Product loading factor(m <sup>2</sup> /m <sup>3</sup> ) : 2.0	
Sample collection and management	Sorbent Tubes	TVOC and 5 VOCs : Tenax-TA
		Aldehydes : DNPH Cartridge
	Air collection Volume (L)	TVOC and 5 VOCs : 4.0
		Aldehydes : 6.0
	Chamber Emission Time(h) : (168 ± 2)	
	Testing Period : 2024.12.20. ~ 2024.12.27.	
Air exchange rate(n/h) : (0.5 ± 0.05)		
Test Apparatus	Emission Chamber Size(L) : 20	
	Temperature and Humidity Control Device, Flow Meter, Air sampling Equipment : ADPAC system(JAPAN)	
	TVOC and 5 VOCs : ATD(PerkinElmer TurboMatrix ATD, USA) GC/MSD (Shimadzu, GC2010 Plus/QP2020)	
	Aldehydes : HPLC(Agilent 1290 Series, USA)	