



TVOC TEST REPORT

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|--------------|------------------------------------|
| Issue number | T8FP-9G4P-WF3B |
| Item | Special purpose coating agent |
| Product Name | M9 |
| Product Use | Coating solution for matte 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 ³ | 0.001 | Less than 0.1 | 0.004 |
| Benzene | mg/m ³ | 0.001 | - | Less than 0.001 |
| Toluene | mg/m ³ | 0.001 | - | Less than 0.001 |
| Ethyl benzene | mg/m ³ | 0.001 | - | Less than 0.001 |
| Xylene | mg/m ³ | 0.001 | - | Less than 0.001 |
| Styrene | mg/m ³ | 0.001 | - | Less than 0.001 |
| Formaldehyde | mg/m ³ | 0.001 | - | Less than 0.001 |
| Acetaldehyde | mg/m ³ | 0.001 | - | Less than 0.001 |

NOTE) · mg/m³ · 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 ²) : 0.040 6 | |
| | Product loading factor(m ² /m ³) : 2.0 | |
| Sample collection and management | Sorbent Tubes | TVOC and 5 VOCs : Tenax-TA |
| | | Aldehydes : DNPH Catridge |
| | 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) | |