

# 광화학대기오염물질 오염도(2023.9)

## - 논현동 측정소

(단위 : ppb)

| 구분 | 오염물질                   | 분자식                             | 논현동  |         |         |
|----|------------------------|---------------------------------|------|---------|---------|
|    |                        |                                 | 중간값  | 90%tile | 10%tile |
| 1  | Ethane                 | C <sub>2</sub> H <sub>6</sub>   | 2.25 | 3.23    | 1.63    |
| 2  | Ethylene               | C <sub>2</sub> H <sub>4</sub>   | 0.71 | 1.19    | 0.39    |
| 3  | Propane                | C <sub>3</sub> H <sub>8</sub>   | 2.37 | 4.94    | 1.35    |
| 4  | Propylene              | C <sub>3</sub> H <sub>6</sub>   | 0.40 | 0.53    | 0.30    |
| 5  | iso-Butane             | C <sub>4</sub> H <sub>10</sub>  | 1.10 | 1.75    | 0.65    |
| 6  | n-Butane               | C <sub>4</sub> H <sub>10</sub>  | 1.87 | 3.73    | 0.99    |
| 7  | Acethylene             | C <sub>2</sub> H <sub>2</sub>   | 0.32 | 0.54    | 0.16    |
| 8  | trans-2-Butene         | C <sub>4</sub> H <sub>8</sub>   | 0.06 | 0.10    | 0.00    |
| 9  | 1-Butene               | C <sub>4</sub> H <sub>8</sub>   | 0.09 | 0.14    | 0.06    |
| 10 | cis-2-Butene           | C <sub>4</sub> H <sub>8</sub>   | 0.05 | 0.08    | 0.00    |
| 11 | Cyclopentane           | C <sub>5</sub> H <sub>10</sub>  | 0.00 | 0.09    | 0.00    |
| 12 | iso-Pentane            | C <sub>5</sub> H <sub>12</sub>  | 0.12 | 0.57    | 0.07    |
| 13 | n-Pentane              | C <sub>5</sub> H <sub>12</sub>  | 0.43 | 0.82    | 0.22    |
| 14 | trans-2-Pentene        | C <sub>5</sub> H <sub>10</sub>  | 0.00 | 0.07    | 0.00    |
| 15 | 1-Pentene              | C <sub>5</sub> H <sub>10</sub>  | 0.03 | 0.06    | 0.00    |
| 16 | cis-2-Pentene          | C <sub>5</sub> H <sub>10</sub>  | 0.00 | 0.05    | 0.00    |
| 17 | 2,2-Dimethylbutane     | C <sub>6</sub> H <sub>14</sub>  | 0.04 | 0.06    | 0.00    |
| 18 | 2,3-Dimethylbutane     | C <sub>6</sub> H <sub>14</sub>  | 0.04 | 0.05    | 0.03    |
| 19 | 2-Methylpentane        | C <sub>6</sub> H <sub>14</sub>  | 0.06 | 0.11    | 0.04    |
| 20 | 3-Methylpentane        | C <sub>6</sub> H <sub>14</sub>  | 0.14 | 0.26    | 0.08    |
| 21 | Isoprene               | C <sub>5</sub> H <sub>8</sub>   | 0.12 | 0.33    | 0.05    |
| 22 | 1-Hexene               | C <sub>6</sub> H <sub>12</sub>  | 0.03 | 0.05    | 0.02    |
| 23 | n-Hexane               | C <sub>6</sub> H <sub>14</sub>  | 0.61 | 1.34    | 0.20    |
| 24 | Methylcyclopentane     | C <sub>6</sub> H <sub>12</sub>  | 0.18 | 0.39    | 0.00    |
| 25 | 2,4-Dimethylpentane    | C <sub>7</sub> H <sub>16</sub>  | 0.00 | 0.00    | 0.00    |
| 26 | Benzene                | C <sub>6</sub> H <sub>6</sub>   | 0.24 | 0.39    | 0.17    |
| 27 | Cyclohexane            | C <sub>6</sub> H <sub>12</sub>  | 0.00 | 0.29    | 0.00    |
| 28 | 2-Methylhexane         | C <sub>7</sub> H <sub>16</sub>  | 0.00 | 0.18    | 0.00    |
| 29 | 2,3-Dimethylpentane    | C <sub>7</sub> H <sub>16</sub>  | 0.00 | 0.00    | 0.00    |
| 30 | 3-Methylhexane         | C <sub>7</sub> H <sub>16</sub>  | 0.10 | 0.26    | 0.00    |
| 31 | 2,2,4-Trimethylpentane | C <sub>8</sub> H <sub>18</sub>  | 0.31 | 0.76    | 0.00    |
| 32 | n-Heptane              | C <sub>7</sub> H <sub>16</sub>  | 0.09 | 0.17    | 0.00    |
| 33 | Methylcyclohexane      | C <sub>7</sub> H <sub>14</sub>  | 0.00 | 0.18    | 0.00    |
| 34 | 2,3,4-Trimethylpentane | C <sub>8</sub> H <sub>18</sub>  | 0.00 | 0.00    | 0.00    |
| 35 | Toluene                | C <sub>7</sub> H <sub>8</sub>   | 2.66 | 4.99    | 1.41    |
| 36 | 2-Methylheptane        | C <sub>8</sub> H <sub>18</sub>  | 0.00 | 0.13    | 0.00    |
| 37 | 3-Methylheptane        | C <sub>8</sub> H <sub>18</sub>  | 0.00 | 0.11    | 0.00    |
| 38 | n-Octane               | C <sub>8</sub> H <sub>18</sub>  | 0.00 | 0.15    | 0.00    |
| 39 | Ethylbenzene           | C <sub>8</sub> H <sub>10</sub>  | 0.58 | 1.01    | 0.34    |
| 40 | m/p-Xylene             | C <sub>8</sub> H <sub>10</sub>  | 0.47 | 0.96    | 0.23    |
| 41 | Styrene                | C <sub>8</sub> H <sub>8</sub>   | 0.40 | 0.82    | 0.11    |
| 42 | o-Xylene               | C <sub>8</sub> H <sub>10</sub>  | 0.44 | 0.82    | 0.25    |
| 43 | n-Nonane               | C <sub>9</sub> H <sub>20</sub>  | 0.00 | 0.15    | 0.00    |
| 44 | Isopropylbenzene       | C <sub>9</sub> H <sub>12</sub>  | 0.00 | 0.00    | 0.00    |
| 45 | n-Propylbenzene        | C <sub>9</sub> H <sub>12</sub>  | 0.19 | 0.48    | 0.00    |
| 46 | m-Ethyltoluene         | C <sub>9</sub> H <sub>12</sub>  | 0.31 | 0.41    | 0.18    |
| 47 | p-Ethyltoluene         | C <sub>9</sub> H <sub>12</sub>  | 0.27 | 0.40    | 0.16    |
| 48 | 1,3,5-Trimethylbenzene | C <sub>9</sub> H <sub>12</sub>  | 0.00 | 0.16    | 0.00    |
| 49 | o-Ethyltoluene         | C <sub>9</sub> H <sub>12</sub>  | 0.00 | 0.17    | 0.00    |
| 50 | 1,2,4-Trimethylbenzene | C <sub>9</sub> H <sub>12</sub>  | 0.46 | 0.72    | 0.26    |
| 51 | n-Decane               | C <sub>10</sub> H <sub>22</sub> | 0.06 | 0.15    | 0.00    |
| 52 | 1,2,3-Trimethylbenzene | C <sub>9</sub> H <sub>12</sub>  | 0.43 | 0.68    | 0.26    |
| 53 | m-Diethylbenzene       | C <sub>10</sub> H <sub>14</sub> | 0.00 | 0.33    | 0.00    |
| 54 | p-Diethylbenzene       | C <sub>10</sub> H <sub>14</sub> | 0.00 | 0.33    | 0.00    |
| 55 | n-Undecane             | C <sub>11</sub> H <sub>24</sub> | 0.54 | 0.65    | 0.33    |
| 56 | n-Dodecane             | C <sub>12</sub> H <sub>26</sub> | 0.24 | 0.35    | 0.00    |

※ 9월 벤젠 값은 0.24 ppb, 환경기준 연간 5  $\mu\text{g}/\text{m}^3$  (약 1.5 ppb at 1기압 20℃) 이내

※ 9월 VOCs 총합 농도값은 20.60 ppb(중간값 기준)

주) 1. 유효자릿수는 소수 둘째 자리까지이며, 0.00으로 표기된 값은 검출한계 이하임을 의미함

2. 중간값(median) : 측정값을 크기순서로 나열하여 중앙에 위치한 값

※ 평균은 극단적인 결과값에 영향을 받으나 중간값은 각 값의 분포상태에 영향을 받지 않음

3. 90 %tile: 농도값 표본을 100 부분으로 분할하여 낮은 값부터 순서대로 일렬로 나열했을 때 90번째 해당하는 값

4. 10 %tile: 농도값 표본을 100 부분으로 분할하여 낮은 값부터 순서대로 일렬로 나열했을 때 10번째 해당하는 값