Table S4 Volatile component of ketones in 9 varieties of muskmelon

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Compound Name | Component RT | Formula | CAS | Relative content/% |
| GTMB | XZM-1 | ZZX | NSM | HMC | BPC | XZM-25 | JX | 20-123 |
| Acetone | 1.34  | C3H6O | 67-64-1 |  | 0.69  |  |  |  |  |  |  |  |
| 3-Pentanone | 2.14  | C5H10O | 96-22-0 |  |  |  |  |  |  |  | 0.16  |  |
| 1-hydroxy-2-Propanone  | 3.45  | C3H6O2 | 116-09-6 | 2.18  |  |  |  |  |  |  |  | 1.69  |
| 2(5H)-Furanone | 6.43  | C4H4O2 | 497-23-4 | 1.27  |  |  |  |  |  |  |  |  |
| Cyclopentanone | 9.94  | C5H8O | 120-92-3 |  |  |  |  |  |  |  |  | 0.25  |
| 1,2-Cyclopentanedione | 10.44  | C5H6O2 | 3008-40-0 | 0.39  |  |  |  |  |  |  | 2.24  | 0.17  |
| Dihydroxyacetone | 10.77  | C3H6O3 | 96-26-4 | 2.21  |  |  |  |  |  |  |  |  |
| 2,4-Dihydroxy-2,5-dimethyl-3(2H)-furan-3-one | 12.27  | C6H8O4 | 10230-62-3 | 0.81  |  |  |  |  |  |  | 0.65  |  |
| 1-Penten-3-one | 14.06  | C5H8O | 1629-58-9 |  |  |  |  | 1.59  |  |  |  |  |
| 2,3-Benzofurandione | 14.35  | C8H4O3 | 4732-72-3 |  | 0.05  |  |  |  |  |  |  |  |
| 3-methyl-2,4(3H,5H)-Furandione  | 17.09  | C5H6O3 | 1192-51-4 |  |  |  |  |  |  |  | 0.29  |  |
| 3-Methyl-4-nonanone | 17.25  | C10H20O | 35778-39-3 |  |  | 0.14  |  |  |  |  |  |  |
| 2,3-dihydro-3,5-dihydroxy-6-methyl-4H-Pyran-4-one  | 17.63  | C6H8O4 | 28564-83-2 | 9.02  |  |  |  |  |  |  | 10.76  |  |
| 2,5-Dimethyl-4-hydroxy-3-hexanone | 17.78  | C8H16O2 | 815-77-0 |  | 0.90  |  |  |  |  |  |  |  |
| 3-Decanone | 18.99  | C10H20O | 928-80-3 |  | 0.57  |  |  |  | 0.67  | 1.03  | 0.65  | 1.20  |
| Ketone, methyl 2-methyl-1,3-oxothiolan-2-yl | 20.69  | C6H10O2S | 33266-06-7 | 4.41  |  |  |  |  |  |  |  |  |
| (E)-5,9-Undecadien-2-one, 6,10-dimethyl | 26.08  | C13H22O | 3796-70-1 |  |  |  | 0.20  |  | 0.35  |  | 1.09  | 0.50  |
| (Z)-5,9-Undecadien-2-one, 6,10-dimethyl  | 26.09  | C13H22O | 3879-26-3 |  | 0.19  |  |  | 0.38  |  |  |  |  |
| 4-(2,6,6-trimethyl-1-cyclohexen-1-yl)-3-Buten-2-one  | 26.89  | C13H20O | 14901-07-6 |  |  |  |  |  |  |  | 0.73  |  |
| 6-Methyl-6-(5-methylfuran-2-yl)heptan-2-one | 26.97  | C13H20O2 | 50464-95-4 |  | 0.14  |  |  |  | 0.24  |  |  | 0.27  |
| 1,6-Dioxacyclododecane-7,12-dione | 28.11  | C10H16O4 | 777-95-7 | 0.28  |  |  |  |  |  |  |  |  |
| 2,5-bis(1,1-dimethylpropyl)-2,5-Cyclohexadiene-1,4-dione  | 30.96  | C16H24O2 | 4584-63-8 | 0.71  |  |  |  |  |  |  |  |  |
| 3,5-di-tert-Butyl-4-hydroxyacetophenone | 34.31  | C16H24O2 | 14035-33-7 | 1.62  |  |  |  |  |  |  |  |  |