Table 1: Pre-exponential factor (s-1 or m3·mol-1·s-1) at Tref=140°C (except Tref=40°C for the bimolecular decomposition of hydroperoxides) and activation energies (kJ·mol-1) used in this study.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Reaction | Parameter | Oleate (i=1) | Linoleate (i=2) | Linolenate (i=3) | Comments |
|  |  | 3.00·10-4 | 7.00·10-4 | 9.00·10-4 | From [Maxime Touffet, Smith, and Vitrac (2023)](#_ENREF_77) |
|  | 89 | 79 | 67 | From [Maxime Touffet, Smith, and Vitrac (2023)](#_ENREF_77) |
|  |  | 4.00·10-10 | 4.50·10-9 | 14.00·10-9 | Close from values reported by for methyl linoleate hydroperoxide at 40°C (~1.23·10-8) by [Cash, George, and Bartley (1987)](#_ENREF_13) |
|  | 100 | 110 | 110 | Close from values reported by for methyl linoleate hydroperoxide (104±11) by [Cash, George, and Bartley (1987)](#_ENREF_13) |
|  |  | 3.80·103 | 8.80·103 | 13.0·103 | From [Small Jr., Scaiano, and Patterson (1979)](#_ENREF_69) |
|  | 14.0 | 14.0 | 14.0 | Guessed from the median range of values obtained for ter-butoxyl radical ([Gray & Williams, 1959](#_ENREF_29)) |
|  |  | 2·106 | 107 | 107 | From [Q.-D. Wang and Ni (2016)](#_ENREF_80) and [Tavadyan, Khachoyan, Martoyan, and Kamal-Eldin (2007)](#_ENREF_72) for oleate and linoleate, respectively. |
|  | 0 | 0 | 0 | From [Tavadyan, Khachoyan, Martoyan, and Kamal-Eldin (2007)](#_ENREF_72) |
|  |  | 18.0·10-2 | 42.0·10-2 | 84.0·10-2 | From [Korcek, Chenier, Howard, and Ingold (1972)](#_ENREF_42) considering two mono-allylic sites for oleate, one bi-allylic site for linoleate and two bi-allylic sites for linolenate. |
|  | 47 | 28 | 24 | Close to values described by [Korcek, Chenier, Howard, and Ingold (1972)](#_ENREF_42) |
|  |  | 106 | 106 | 106 | From [Ingold (1969)](#_ENREF_36) |
|  | 0 | 0 | 0 | From [Ingold (1969)](#_ENREF_36) |
|  |  | 2.28·106 | 2.28·106 | 2.28·106 | Close from values described by [Pfaendtner and Broadbelt (2008)](#_ENREF_59) and [Oakley, Casadio, Shull, and Broadbelt (2018)](#_ENREF_54) |
|  | 47 | 47 | 47 | Close from values described by [Pfaendtner and Broadbelt (2008)](#_ENREF_59) and [Oakley, Casadio, Shull, and Broadbelt (2018)](#_ENREF_54) |
|  |  | 4.00·105 | 1.5.0·106 | 1.5·107 | Close from values described by [Maxime Touffet, Smith, and Vitrac (2023)](#_ENREF_77) |
|  | 55..0 | 45.0 | 56.0 | Close from values described by [Maxime Touffet, Smith, and Vitrac (2023)](#_ENREF_77) |
|  | 8.29·106 | 9.31·106 | 9.74·106 | From Eq. (5) |
|  | 4.27·105 | 1.41·106 | 6.32·106 | From Eq. (7), close from values described by [Richaud, Audouin, Fayolle, Verdu, and Matisova-Rychla (2012)](#_ENREF_63), [Howard and Ingold (1967)](#_ENREF_33), [Katušin-Ražem and Ražem (2000)](#_ENREF_38), [Tavadyan, Khachoyan, Martoyan, and Kamal-Eldin (2007)](#_ENREF_72). |