The following table is from the Particle Data Group.[1]

μ MEAN LIFE τ

Measurements with an error $> 0.001 \times 10^{-6}$ s have been omitted.

VALUE (10^{-6} s)		DOCUMENT ID		TECN	CHG	COMMENT
2.1969811±0.0000022 OUR AVERAGE						
2.1969803±0.0000021	±0.0000007 [1]	TISHCHENKO	13	CNTR	+	Surface μ^+ at PSI
2.197083 ±0.000032	±0.000015	BARCZYK	08	CNTR	+	Muons from π^+ decay at rest
2.197013 ±0.000021	±0.000011	CHITWOOD	07	CNTR	+	Surface μ^+ at PSI
2.197078 ±0.000073		BARDIN	84	CNTR	+	
2.197025 ±0.000155		BARDIN	84	CNTR	−	
2.19695 ±0.00006		GIOVANETTI	84	CNTR	+	
2.19711 ±0.00008		BALANDIN	74	CNTR	+	
2.1973 ±0.0003		DUCLOS	73	CNTR	+	
• • • We do not use the following data for averages, fits, limits, etc. • • •						
2.1969803±0.0000022		WEBBER	11	CNTR	+	Surface μ^+ at PSI

[1] TISHCHENKO 13 uses 1.6×10^{12} μ^+ events and supersedes WEBBER 11.

From "V minus A" theory we have the following formula for muon lifetime τ.

$$\tau = \frac{96\pi^2 h}{G_F^2 \left(m_\mu c^2\right)^5}$$

Symbol G_F is Fermi coupling constant, m_μ is muon mass.

From NIST[2] we have

$$\begin{aligned} G_F &= 1.1663787 \times 10^{-5}\ \text{GeV}^{-2} \\ m_\mu &= 1.883531627 \times 10^{-28}\ \text{kilogram} \\ h &= 6.62607015 \times 10^{-34}\ \text{joule second (exact)} \\ c &= 299792458\ \text{meter second}^{-1}\ \text{(exact)} \\ 1\,\text{eV} &= 1.602176634 \times 10^{-19}\ \text{joule (exact)} \end{aligned}$$

Hence

$$\tau = 2.18735 \times 10^{-6}\,\text{second}$$

The result is a bit smaller than the PDG value.

$$\frac{\tau}{2.1969811 \times 10^{-6}\ \text{second}} = 0.9956$$

[1] https://pdg.lbl.gov/2020/listings/rpp2020-list-muon.pdf
[2] https://physics.nist.gov/cuu/Constants/index.html