

BioDiesel

Fatty Methyl Esters

Formula, molecular weight and properties of fatty acids and their methyl esters.

Fatty acid <i>Methyl ester</i>	Formula	Acronym	Molecular weight	Melting point [°C]	Cetane number
Palmitic acid <i>Methyl palmitate</i>	C ₁₆ H ₃₂ O ₂ C ₁₇ H ₃₄ O ₂	C16:0	256.4 270.5	63-64 30.5	--- 74.5
Stearic acid <i>Methyl stearate</i>	C ₁₈ H ₃₆ O ₂ C ₁₉ H ₃₈ O ₂	C18:0	284.5 298.5	70 39	--- 86.9
Oleic acid <i>Methyl oleate</i>	C ₁₈ H ₃₄ O ₂ C ₁₉ H ₃₆ O ₂	C18:1	282.5 296.5	16 -20	--- 47.2-55
Linoleic acid <i>Methyl linoleate</i>	C ₁₈ H ₃₂ O ₂ C ₁₉ H ₃₄ O ₂	C18:2	280.5 294.5	-5 -35	--- 28.5-42.2
Linolenic acid <i>Methyl linolenate</i>	C ₁₈ H ₃₀ O ₂ C ₁₉ H ₃₂ O ₂	C18:3	278.4 292.5	-11 -52/-57	--- 20.6-22.7