

Table II-3. Nucleosynthesis of a $25M_{\odot}$ population I star.

Stage	Temperature (K)	Density (g/cm^3)	Duration time
Hydrogen burning	4×10^7	5	7×10^6 yrs
Helium burning	2×10^8	700	5×10^5 yrs
Carbon burning	6×10^9	2×10^5	600 yrs
Neon burning	1.2×10^9	4×10^6	1 yr
Oxygen burning	1.5×10^9	10^7	6 months
Silicon burning	2.7×10^9	3×10^7	1 day
Core collapse	5.4×10^9	3×10^9	1.4 sec
Core bounce	2.3×10^{10}	4×10^{14}	0.001 sec
Star explosion	10^9 to 5×10^9	Varies	0.1 to 10 sec