



Propellant Data

Part Number: 8125RC
Propellant Type: Redline™
Visual Effect: Brilliant red flame, moderate smoke
% Solids: 81
Density: 0.0625 lb/in³
I_{sp} at 1000/14.7 PSI: 209.1 seconds
Burn Rate Exponent: 0.366
Burn Rate Coefficient: 0.0297

Thermodynamic Properties at 1000/14.7 PSI:

ENTHALPY = -64.22533 DENSITY = 1.727
 CSTAR = 4240.99

	CHAMBER	THR(SHIFT)	EXH(SHIFT)
PRESSURE (PSIA)	1000.000	564.211	14.700
EPSILON	.000	1.000	8.623
ISP	.000	89.330	209.060
ISP (VACUUM)	.000	163.703	225.770
TEMPERATURE (K)	2238.589	2046.538	1082.531
MOLECULAR WEIGHT	26.502	26.632	26.792
MOLES GAS/100G	3.773	3.755	3.733
CF	.000	.678	1.586
PEAE/M (SECONDS)	.000	74.373	16.710
GAMMA	1.225	1.225	1.246
HEAT CAP (CAL)	40.867	40.587	37.599
ENTROPY (CAL)	213.043	213.043	213.043
ENTHALPY (KCAL)	-64.225	-73.393	-114.434
DENSITY (G/CC)	9.81721E-03	6.08854E-03	3.01690E-04
ITERATIONS	6	4	18

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