



Propellant Data

Part Number: 8121T
Propellant Type: Blue Thunder™
Visual Effect: Blue-violet flame, little smoke
% Solids: 81
Density: 0.05871 lb/in³
I_{sp} at 1000/14.7 PSI: 240.2 seconds
Burn Rate Exponent: 0.321
Burn Rate Coefficient: 0.047

Thermodynamic Properties at 1000/14.7 PSI:

ENTHALPY = -44.86393 DENSITY = 1.622
 CSTAR = 4889.93

	CHAMBER	THR(SHIFT)	EXH(SHIFT)
PRESSURE (PSIA)	1000.000	558.927	14.700
EPSILON	.000	1.000	8.228
ISP	.000	104.333	240.182
ISP (VACUUM)	.000	189.282	258.565
TEMPERATURE (K)	2616.532	2356.583	1176.537
MOLECULAR WEIGHT	22.959	22.988	23.038
MOLES GAS/100G	4.356	4.350	4.341
CF	.000	.686	1.580
PEAE/M (SECONDS)	.000	84.950	18.383
GAMMA	1.235	1.238	1.278
HEAT CAP (CAL)	45.549	44.948	39.689
ENTROPY (CAL)	247.822	247.823	247.823
ENTHALPY (KCAL)	-44.864	-57.369	-111.134
DENSITY (G/CC)	7.27618E-03	4.52124E-03	2.38699E-04
ITERATIONS	7	3	23

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