

PROPELLANT	HF	DENSITY	WEIGHT	MOLES	VOLUME
N2O	18.6500	.7220	.9000	.0204	1.2465
PROPANE	-29.6000	.5853	.1000	.0023	.1709

GRAM ATOMS/100 GRAMS

H 1.8142 O 2.0449 N 4.0897 C .6803

ENTHALPY = 31.42421 DENSITY = .706  
 CSTAR = 5304.89

	CHAMBER	THR(SHIFT)	EXH(SHIFT)
PRESSURE (PSIA)	1000.000	574.621	14.700
EPSILON	.000	1.000	9.097
ISP	.000	108.925	266.599
ISP (VACUUM)	.000	203.672	288.648
TEMPERATURE(K)	3369.838	3170.194	1871.638
MOLECULAR WEIGHT	26.262	26.558	27.529
MOLES GAS/100G	3.808	3.765	3.633
CF	.000	.661	1.617
PEAE/M (SECONDS)	.000	94.747	22.049
GAMMA	1.239	1.237	1.243
HEAT CAP (CAL)	39.192	39.039	36.985
ENTROPY (CAL)	233.563	233.562	233.563
ENTHALPY (KCAL)	31.424	17.794	-50.226
DENSITY (G/CC)	6.46260E-03	3.99187E-03	1.79293E-04
ITERATIONS	10	3	10

GRAMS/100 GRAMS

H	.03246	.02356	.00030
H2	.20147	.17365	.12678
HO	1.66997	1.28599	.00514
HO2	.00756	.00432	.00000
H2O	12.54211	13.05955	14.33751
H2O2	.00066	.00037	.00000
O	.29417	.19423	.00002
O2	1.75509	1.41145	.00021
HN	.00011	.00004	.00000
HNO	.00118	.00061	.00000
HNO2	.00023	.00012	.00000
HNO2	.00021	.00010	.00000
H2N	.00009	.00004	.00000
H3N	.00008	.00004	.00000
N	.00054	.00024	.00000
NO	1.77980	1.30750	.00148
NO2	.00243	.00139	.00000
N2	56.39445	56.62357	57.25532
N2O	.00093	.00051	.00000
HCOOH	.00009	.00005	.00000
CHN	.00002	.00001	.00000
CHNO	.00004	.00002	.00000
CHO	.00032	.00014	.00000
CH2O	.00001	.00000	.00000
CNO	.00001	.00000	.00000
CO	9.52543	8.47338	4.30678
CO2	14.08292	15.75890	22.39451