

Typical Chemistry

MATERIAL	APPROXIMATE CHEMICAL COMPOSITION
ALUMINUM METAL POWDER:	Trace impurities of Si, Cu, Mn, Fe, Mg
ALUMINUM CARBIDE:	Al 73.50%, C 25.36%, H 0.02%, N 0.40%, O 0.70%
ALUMINUM NITRIDE:	Al 66.45%, N 33.05%, C 0.31%
BORON CARBIDE:	B 80.4%, C 19.21%, Fe 0.05%, H 0.003%, N 0.17%, O 0.22%
CADMIUM METAL POWDER:	Cd 99.9%, Cu .005%, Fe .001%, Pb .002%, Zn .05%
CALCIUM FLOURIDE:	CaF ₂ 95%, Cl .01%, So ₄ .05%, Heavy Metals .005%, Fe. 005
CHROMIUM METAL POWDER:	Cr 99.86%, Al 0.02%, Fe 0.02%, Si 0.01%, C 0.02%, S 0.01%, O 0.02%
CHROMIUM DIBORIDE:	Cr 70.2%, B 29.3%, C 0.05%, Fe 0.05%, O 0.2%, N 0.05%
CHROMIUM CARBIDE:	Cr 86.4%, Total C 13.3%, Free C 0.18%, Fe 0.05%, Si 0.06%, O 0.1%, N .07%, H 0.006%
CHROMIUM TRIOXIDE:	Cr ₂ O ₃ 99.5%, Feo 0.1%, SiO ₂ 0.08%
CHROMIUM DISILICIDE:	Cr 47.8%, Si 51.4%, Fe 0.15%, c 0.15%, N 0.02%, O 0.3%
COBALT METAL POWDER:	Co 99.9%, Ni 0.065%, Cu 0.001%, Fe 0.001%, S 0.026%, C 0.054%, P Nil
COLUMBIUM METAL POWDER:	Nb 99.8%, C .01%, Ta .01%, Ti .004%, Fe 0.05%
COLUMBIUM DIBORIDE:	Nb 81.0%, B 18.7%, C 0.03%, Fe 0.02%, O 0.1%, N 0.05%
COLUMBIUM CARBIDE:	Chlorination residue .04%, Total C 10.93%, Free C .02%, Ta .08%, Ti .01%, Fe 0.1%
COLUMBIUM DISILICIDE:	Nb 62.3%, Si 37.2%, Fe 0.1%, C 0.1%, O 0.25%, N 0.05%
HAFNIUM METAL POWDER:	Hf Zr 99.8%, W 10 ppm, Fe 170 ppm, O 800 ppm, Si 150 ppm, Ti 360 ppm, C 86 ppm
HAFNIUM BORIDE:	Hf Zr 89%, Zr 3.0%, B 10.75%, C 0.05%, Fe 0.005%, O 0.15%, N 0.05%, H ₂ O 0.1
HAFNIUM CARBIDE:	Hf 93.50%, C 6.31%, Free C 0.30%, H 0.002%, N 0.11%, O 0.065%
HAFNIUM OXIDE:	Hf/Hf + Zr 95.4%, Hf + Zr 97.27%, Al 30 ppm, Ca 7600 ppm, Fe 3100 ppm, Mg 3400 ppm, Si 2180 ppm, Ti 1.1%
INCONEL METAL POWDER:	Cr 15.42%, Fe 7.21%, Ni-Balance
INVAR METAL POWDER:	Ni 49.90%, Fe 49.85%, C 0.02%, Mn 0.10%, Si 0.019%, P 0.005%, S 0.010%
IRON METAL POWDER:	Fe 99.91%, Al .002%, C 0.003%, Cr .002%, Co .007%, Ni 0.030%, O .01%, H .01%
IRON FLAKE:	Fe 99.99%, Al .002%, C .003%, Cr .002%, O .01%, H .01%
LANTHANUM HEXABORIDE:	La 68.40%, B 31.40%, C 0.07%, H 0.001%, N 0.008%, O 0.04
LEAD POWDER:	Pb 99.9%, Sb & Sn .005%, As .0001%, Fe .001%, Ag .0002%
MANGANESE METAL POWDER:	Mn 99.9%, Fe .03%, Si .02%, Cr .02%, Ni .01%, Ca .01%, O .01%
MAGNESIUM METAL POWDER:	Mg 99.8%, Si .02%, Cu .005%, Zn .005%, Al .05%
MOLYBDENUM METAL POWDER:	Mo 99.8%, Total C 0.006%, Fe 0.008%, Cr 0.001%, Co 0.001%, Cu 0.001%, Ni 0.002%, O 0.02%, w 0.001%
MOLYBDENUM BRIQUETTES:	Mo 99.92%, O 0.025%, H 0.0003%, N 0.0003%, C 0.006%, Si 0.006%, Fe 0.01%, Ni 0.006%
MOLYBDENUM DIBORIDE:	Mo 81.65%, B 18.23%, C 0.03%, H 0.002%, N 0.005%, O 0.02%
MOLYBDENUM CARBIDE:	Total C 5.87%, Free C 0.08%, H 0.003%, N 0.02%, O 0.09%, Balance Mo.
MOLYBDENUM DISILICIDE:	Mo 62.19%, Si 37.47%, C 0.14%, Fe 0.01%, H 0.001%, N 0.03%, O 0.09%
MONEL METAL POWDER:	Cu 28.90%, Ni 68.50, Fe 0.34%, Si 0.91%, C 0.04%, Mn 0.88%, P 0.001%, S 0.004%
NICHROME METAL POWDER:	80% Ni, 20% Cr, C .051%, Mn .95%, Si 1.28%, P .003%, S .015%, Cr 19.76%, Fe .28%, Ni Balance
NICKEL METAL POWDER:	Ni (including Cobalt) 99.9%, Co .05%, C .006%, Fe .05%, S .007%, Cu .005%
NICKEL OXIDE:	Ni 77%, Co .20%, Fe .005%, Cu .02%, Pb .005%, Zn .02%, Balance O
SILICA:	SiO ₂ 99.99%, Fe ₂ O ₃ 0.005%, CaO Trace, MgO Trace
SILICON CARBIDE:	SiC 98.26%, Free C .19%, Fe Surface .10%, Si Surface .19%, Other elements 1.26%
SILICON NITRIDE:	Si 59.4%, N 38.6%, C 0.5%, Fe 0.3%
TANTALUM METAL POWDER:	H ₂ 10 ppm, O ₂ 1300 ppm, N ₂ 74 ppm, Nb 30 ppm, Fe 14 ppm, Mo 10 ppm, Ni 10 ppm, W 10 ppm, Zr 10 ppm, Ti 10 ppm.
TANTALUM DIBORIDE:	Ta 89.1%, B 10.6%, C 0.05%, Fe 0.1%, O 0.1%, N 0.05%
TANTALUM CARBIDE:	Total C 6.28%, Free C 0.10%, Nb 0.18%, Ti 0.005%, Fe 0.04%, Ta balance
TANTALUM NITRIDE:	Ta 93.75%, N 6.10%, C 0.06%
TANTALUM OXIDE:	Loss on Ignition 0.21%, Chlorination residue 0.06%, Nb ₂ O ₅ 0.005%, TiO ₂ 0.005%, Fe 0.05%, Ta ₂ O ₅ Balance
TANTALUM SILICIDE:	Ta 75.9%, Si 23.6%, Fe 0.1%, C 0.1%, O 0.2%, N 0.05%
TELLURIUM METAL POWDER:	Se 100 ppm, (less than) Ge 10 ppm, Cr 10 ppm, In 10 ppm, Zr 10 ppm, Ti 10 ppm, Cu 10 ppm
THORIUM OXIDE:	ThO ₂ 99.9%, Rare Earth Oxide 30 ppm, P ₂ O ₅ 50 ppm Fe 5 ppm, CaO 20 ppm, MgO 200 ppm, Na + K + Li 1000 ppm
TIN METAL POWDER:	Sn 99.9%, Acid and Bromine 0.02%, Sb 0.02%, As 0.00005%, Cu 0.01%, Fe 0.01%, Pb 0.005%, Zn 0.001%
TITANIUM METAL SPONGE:	N 0.008%, Fe 0.04%, C 0.018%, CL 0.13%, MgO .192%, Moisture 0.01%, H 0.022%, Ti Balance
TITANIUM METAL POWDER:	Si 0.002%, Fe 0.026%, Ni 0.01%, V 0.01%, Cr 0.01%, N 0.005%, Cl 0.15%, Na 0.11%, O 0.023%, H 0.003%
TITANIUM DIBORIDE:	Ti 68.81%, B 30.93%, C 0.10%, H 0.001%, N 0.05%, O 0.02%
TITANIUM CARBIDE:	Total C 19.33%, Free C 0.025%, Chlorination Residue 0.02, H 50 ppm, N 1800 ppm, O 1600 ppm, Fe 0.95%, Bal-Ti
TITANIUM NITRIDE:	Ti 77.6%, N 21.2%, C 0.15%
TITANIUM DIOXIDE:	As 0.0001%, Fe 0.02%, Pb 0.03%, Zn 0.01%, Bal-Ti
TITANIUM DISILICIDE:	Ti 46.07%, Si 53.10%, C 0.09%, H 0.004%, N 0.005%, O 0.28
TUNGSTEN METAL POWDER:	W 99.94%, Fe 0.011%, C 0.005%, Ni 0.003%, Si 0.008%, O 0.016%
TUNGSTEN BORIDE:	W 94.35%, B 5.5%, C 0.05%, Fe 0.05%, O 0.1%, N 0.05%
TUNGSTEN CARBIDE:	Total C 6.16%, Free C 0.07%, O 0.07%, Fe 0.010%, Bal-Wp



TEL: 800-486-2436

TEL:1-201-384-5606 FAX:1-201-387-0291

Website: <http://www.micronmetals.com>

Typical Chemistry

MATERIAL	APPROXIMATE CHEMICAL COMPOSITION
TUNGSTEN TRIOXIDE:	Mo 0.05%, Pb 0.005%, Fe 0.003%, As 0.001%, Wo3-Balance
TUNGSTEN DISILICIDE:	W 76.0%, Si 23.4%, C 0.12%, Fe 0.15%, N 0.005%, O 0.07%
VANADIUM METAL POWDER:	Fe 0.14%, Si 0.18%, A 0.01%, C 0.074%, Balance-Va.
VANADIUM BORIDE:	V 70.00%, B 29.60%, C 0.04%, H 0.001%, N 0.005%, O 0.18
VANDIUM CARBIDE:	V 81.60%, Total C 18.20%, Free C 1.30%, H 0.001%, N 0.005%, O 0.13
VANADIUM PENTOXIDE:	V2O5 99.7%, Fe 0.01%, K 0.01%, Na 0.01%, SpG3.36
ZINC:	Zn 99.8%, As 0.00001%, Fe 0.005%, Pb 0.01%
ZIRCONIUM METAL POWDER:	Zr 99.5%, Ti .03%, Al .05%, Chlorides .02%, Fe .20%, Ca .02%, Sn .01%, H .10%, SpG 6.5
ZIRCONIUM CARBIDE:	Zr 88.0%, C 11.49%, Free C 0.60%, H 0.004%, N 0.30%, O 0.16%
ZIRCONIUM DIBORIDE:	Zr 80.41%, B 19.20%, C 0.07%, H 0.007%, N 0.2%, O 0.19%
ZIRCONIUM NITRIDE:	Zr 87.6%, N 12.3%, C 0.1%, Fe 0.08%
ZIRCONIUM OXIDE:	ZrO2 + HfO2 (Min) 93.5%, SiO2 0.62%, CaO 4.80%, MgO 0.25%, Fe2O3 0.10%, Al2O3 0.18%, 0.11%
ZIRCONIUM SILICIDE:	Zr 61.7%, Si 38.0%, Fe 0.05%, C 0.08%, O 0.025%, N 0.05