

NiO

Run No.	Temp (°C)	Pressure (psi)	Grain Size (microns)	Time (min)	KHN	Results
11C	940	250,000	0.55	8	764	Good sample, very brittle, delaminated.
14C	890 (1360)	250,000		12	575	Good sample.
17C	910 (1271)	500,000		10		Very poor.
18C	1000* (1656)	500,000		2		Highly delaminated.
22C	1300* (1788)	250,000	0.32	10	800	Two large pieces, did not delaminate.
23C	990 (1591)	250,000	0.52	10	134	Delaminated 6 large pieces. Green on end, middle black.
27C	980* (1586)	250,000	0.34	9	728	Delaminated, large disks.
32C	1000 (1664)	500,000				Delaminated large porous disks (single crystals).
34C	960* (1439)	500,000		10		Delaminated, porous.

*Temperature estimated from power in parenthesis.

Cr₂O₃

Run No.	Temp. (°C)	Pressure (psi)	Time (min)	Grain Size	Results
12C	1400	250,000	10	0.85	116KHN, fair structure, fibrous structure
15C	940*	500,000	10		Very poor, crumbled piece, dense in middle
16C	1580*	250,000	3	0.22	1364KHN, poor disk sent to metallography.
28C	1260*	250,000	4	0.38	Fair, too porous to test.
29C	1230*	250,000	6	0.28	91KHN, delaminated, very porous.
30C	1350	500,000	4		Very poor, reacted with heater.

* Temperature estimated for power.

Al₂O₃

Run No.	Temp. (° C)	Pressure (psi)	Grain Size (mm)	Hardness (KHN)	Time	(misc.)	Results
12A	NA	250,000			10		Temperature too low, powder
13A	NA	250,000			9		No densification
14A	NA	250,000			14		No densification
16A	NA	250,000			10		Slightly dense, no strength
17A	NA	250,000			5		Dense, Al ₂ O ₃ formed
1C	320	250,000			10		Sample cut longwise, many cracks. Two distinct areas.
2C	NA	250,000			3		High hardness, different grain sizes.
3C	NA	250,000			7		Sample cut long, distinct areas (2).
4C	NA	250,000			3		Sample broke in many pieces, opaque. Not hard.
6C	1380	250,000			4		Disk obtained, large grain size and high temperature
7C	NA	250,000	0.0005		10		Sample cut lengthwise.
8C	NA	250,000	0.025	1600	3		Sample delaminated
9C	NA	45,000		2000	10		Melted Ni sleeve 1453° C, punch oxidized. No samples.
10C	1500	250,000	0.015	2000	4		Delaminated large disk.
98B	1000	31,000			5		Al ₂ O ₃ separated from Ni tube. Some spinel formed on periphery
100B	1050	45,000			18		
102B	1300	31,000			1		
105B	1055				7		