

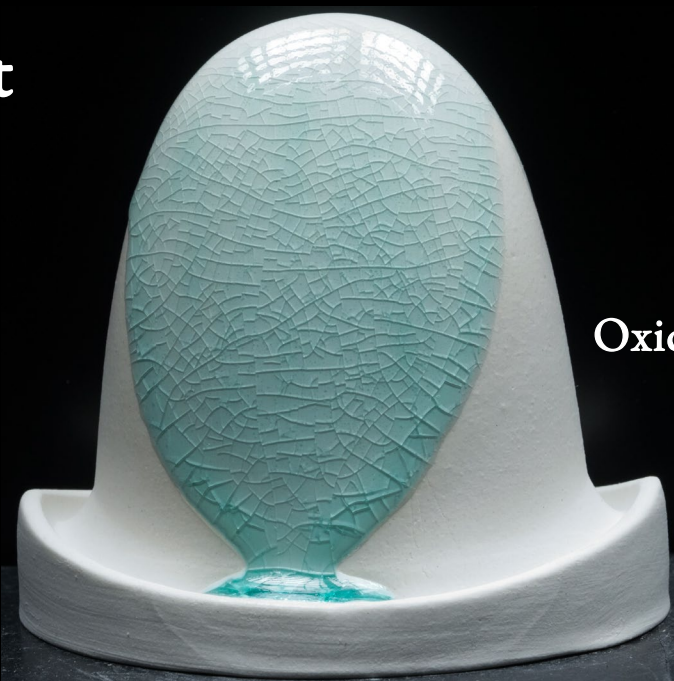
Birdie's Nest- $\Delta 6$

Lab 5a-Color Wheel

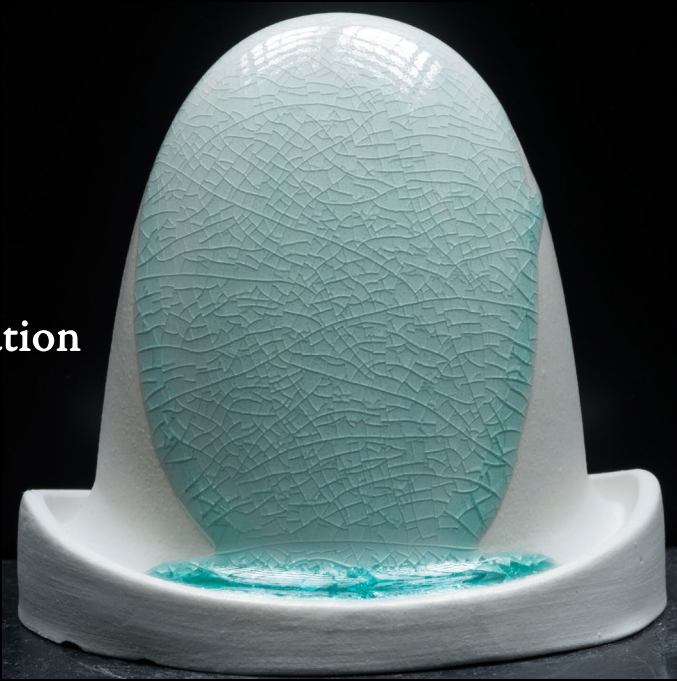
Birdie's Nest

Original
070722-1

Neph Sy	24.36
Dolomite	20.28
EPK	5.92
Flint	17.84
3134	29.59
Bentonite	2.01
Copper Carbonate	0.50
Water	60



1-3 Second Dip



2-3 Second Dips



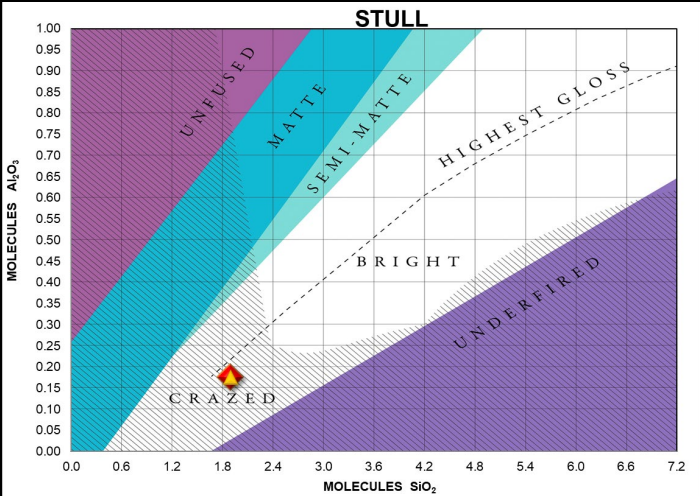
Reduction



Oxidation

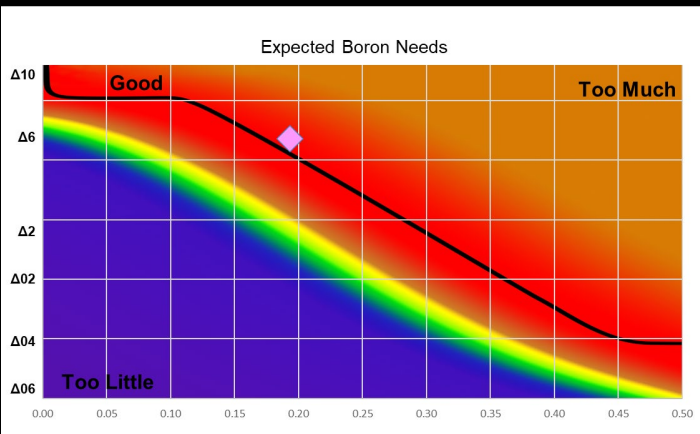
UMF

SiO ₂ :Al ₂ O ₃ Ratio 10.78 : 1		Alkali Metals 0.23		Alkaline Earths 0.77	
SiO ₂ 1.91	Collective "Al ₂ O ₃ " 0.18	Na ₂ O 0.20	K ₂ O 0.03	MgO 0.25	CaO 0.51
B ₂ O ₃ 0.20	Al ₂ O ₃ 0.18	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



EUMF

SiO ₂ :Al ₂ O ₃ Ratio 10.78 : 1		Alkali Metals 0.24		Alkaline Earths 0.76	
SiO ₂ 1.90	Collective "Al ₂ O ₃ " 0.18	Na ₂ O 0.20	K ₂ O 0.03	MgO 0.25	CaO 0.51
B ₂ O ₃ 0.19	Al ₂ O ₃ 0.18	Li ₂ O	CuO 0.01	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



Ceramic
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Chrome Oxide

0.5%

Oxidation

Reduction

1-3 Second Dip

2-3 Second Dips

1-3 Second Dip

2-3 Second Dips

2%



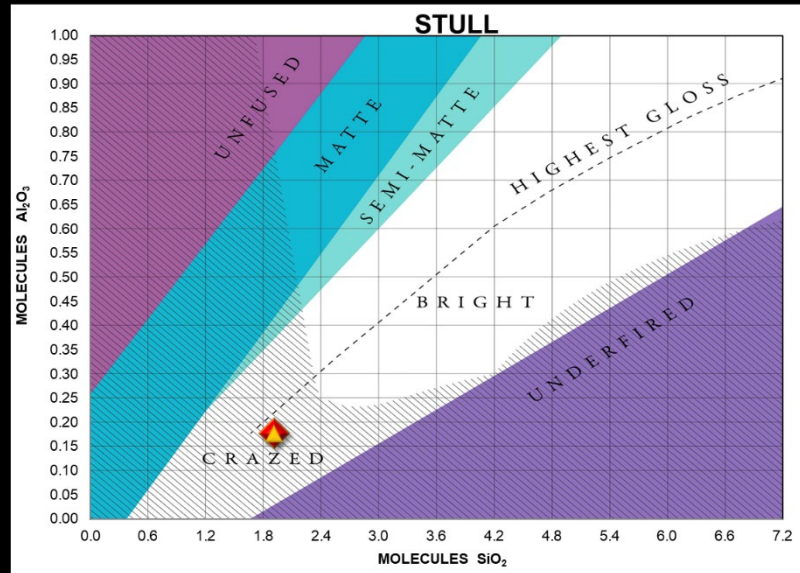
Ceramic
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Birdie's Nest - 070722

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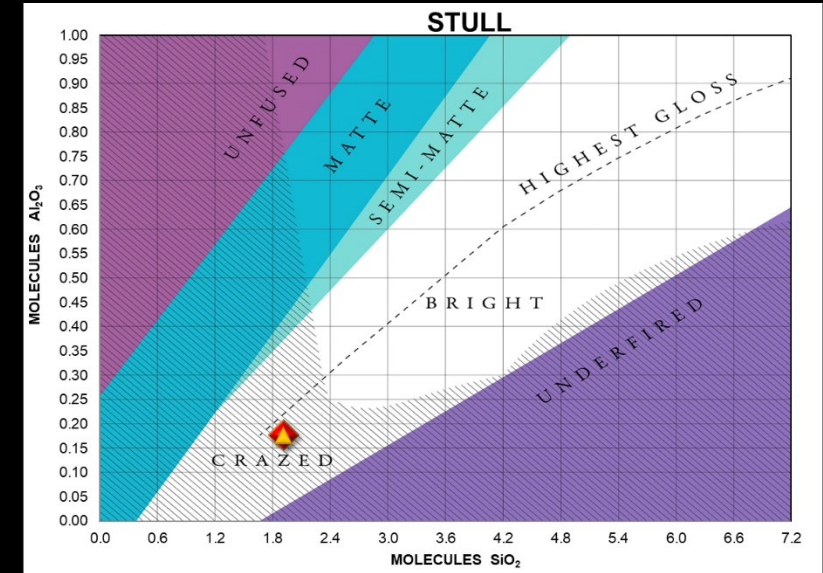
Chrome Oxide

SiO ₂ :Al ₂ O ₃ Ratio 10.78 :1		Alkali Metals 0.23		Alkaline Earths 0.77	
SiO ₂ 1.91	Collective "Al ₂ O ₃ " 0.18	Na ₂ O 0.20	K ₂ O 0.03	MgO 0.25	CaO 0.51
B ₂ O ₃ 0.20	Al ₂ O ₃ 0.18	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃ 0.01	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



0.5%

SiO ₂ :Al ₂ O ₃ Ratio 10.78 :1		Alkali Metals 0.23		Alkaline Earths 0.77	
SiO ₂ 1.91	Collective "Al ₂ O ₃ " 0.18	Na ₂ O 0.20	K ₂ O 0.03	MgO 0.25	CaO 0.51
B ₂ O ₃ 0.20	Al ₂ O ₃ 0.18	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃ 0.03	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



2%



Ceramic
Materials
Workshop

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Cobalt Carbonate

0.5%

Oxidation

Reduction

1-3 Second Dip

2-3 Second Dips

1-3 Second Dip

2-3 Second Dips

2%



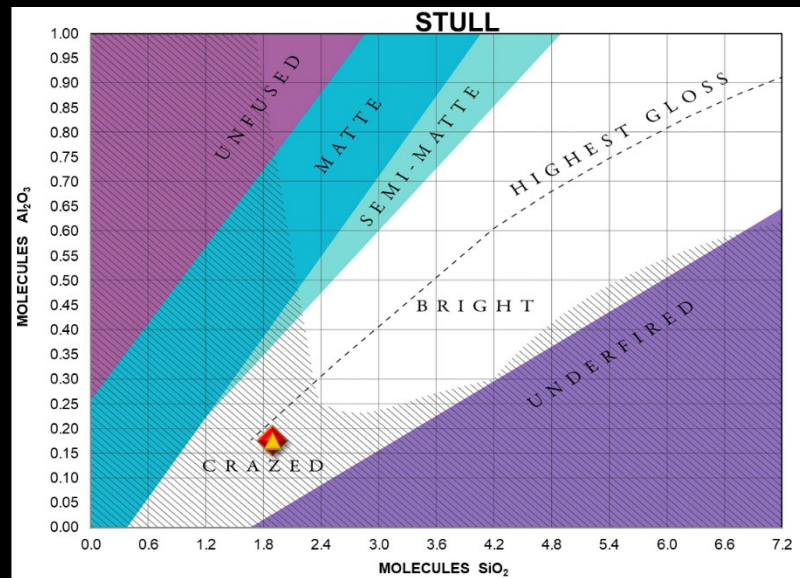
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Birdie's Nest - 070722

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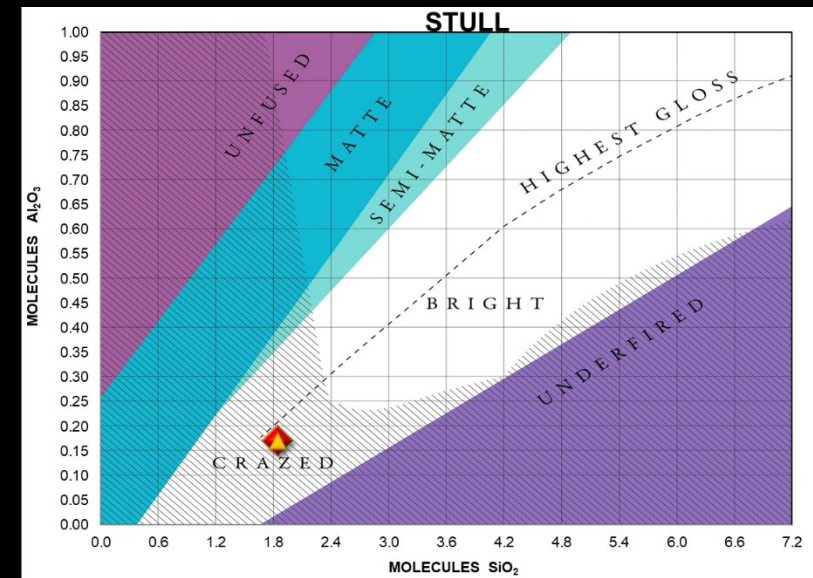
Cobalt Carbonate

SiO ₂ :Al ₂ O ₃ Ratio 10.78 :1		Alkali Metals 0.23		Alkaline Earths 0.77	
SiO ₂ 1.90	Collective "Al ₂ O ₃ " 0.18	Na ₂ O 0.20	K ₂ O 0.03	MgO 0.25	CaO 0.51
B ₂ O ₃ 0.19	Al ₂ O ₃ 0.17	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO 0.01

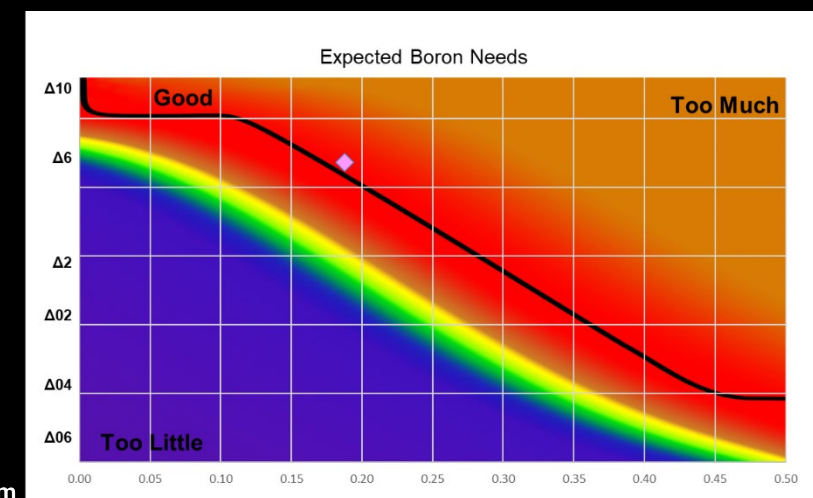


0.5%

SiO ₂ :Al ₂ O ₃ Ratio 10.78 :1		Alkali Metals 0.22		Alkaline Earths 0.78	
SiO ₂ 1.84	Collective "Al ₂ O ₃ " 0.17	Na ₂ O 0.20	K ₂ O 0.03	MgO 0.24	CaO 0.50
B ₂ O ₃ 0.19	Al ₂ O ₃ 0.17	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO 0.04



2%



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Cobalt Oxide

0.5%

Oxidation

Reduction

1-3 Second Dip

2-3 Second Dips

1-3 Second Dip

2-3 Second Dips

2%



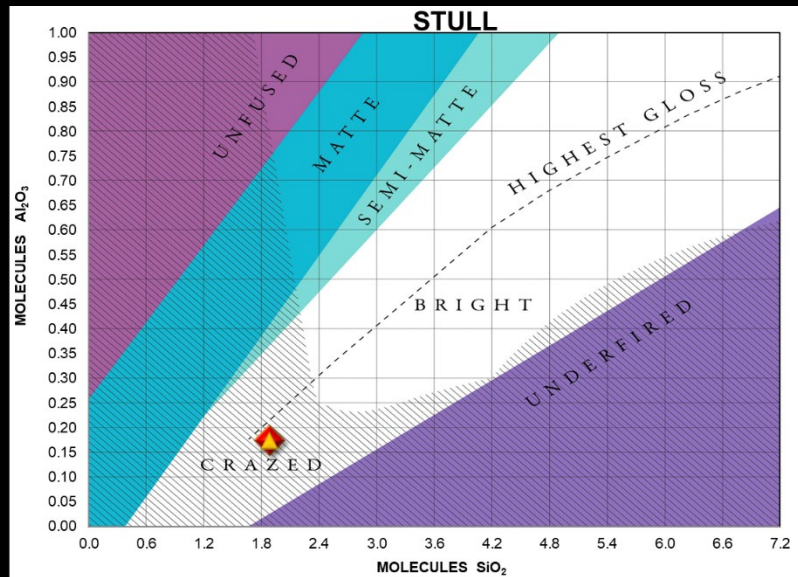
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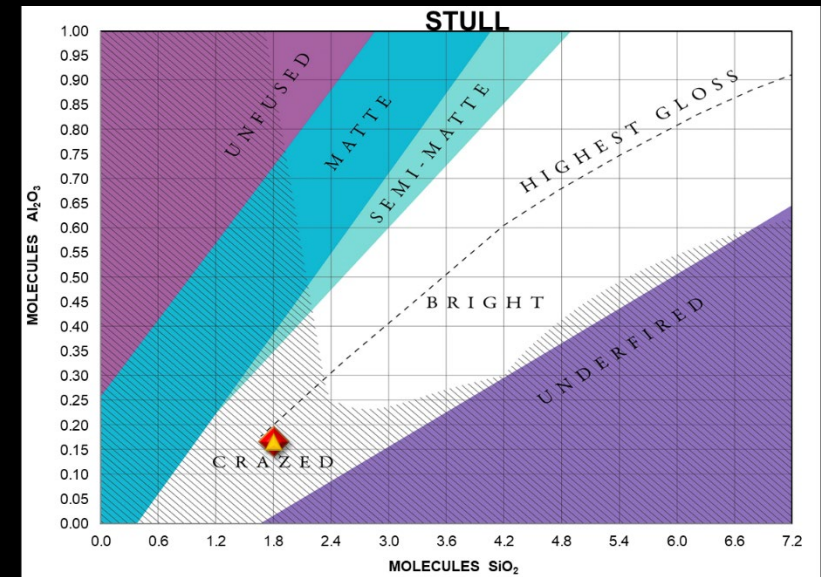
Cobalt Oxide

SiO ₂ :Al ₂ O ₃ Ratio 10.78 :1		Alkali Metals 0.23		Alkaline Earths 0.77	
SiO ₂ 1.89	Collective "Al ₂ O ₃ " 0.17	Na ₂ O 0.20	K ₂ O 0.03	MgO 0.25	CaO 0.51
B ₂ O ₃ 0.19	Al ₂ O ₃ 0.17	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO 0.01

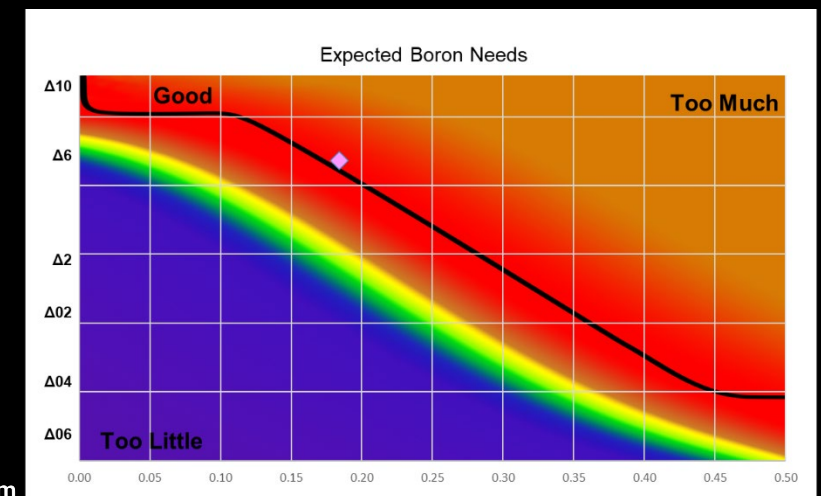


0.5%

SiO ₂ :Al ₂ O ₃ Ratio 10.78 :1		Alkali Metals 0.22		Alkaline Earths 0.78	
SiO ₂ 1.81	Collective "Al ₂ O ₃ " 0.17	Na ₂ O 0.19	K ₂ O 0.02	MgO 0.24	CaO 0.48
B ₂ O ₃ 0.18	Al ₂ O ₃ 0.17	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO 0.06



2%



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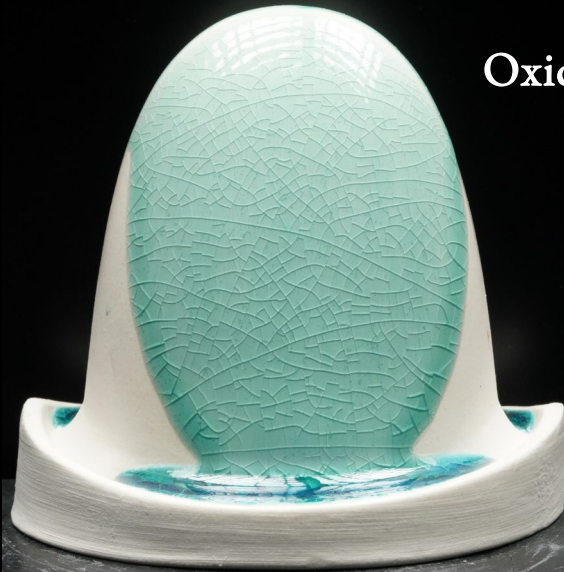
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Copper Carbonate

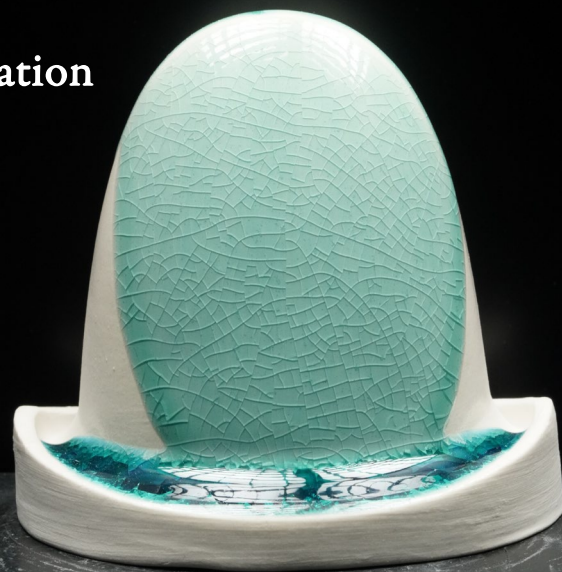
Oxidation

Reduction

1%



1-3 Second Dip



2-3 Second Dips

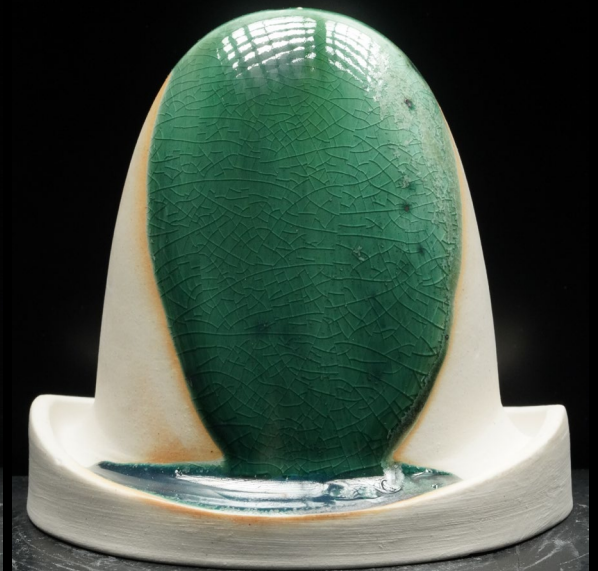
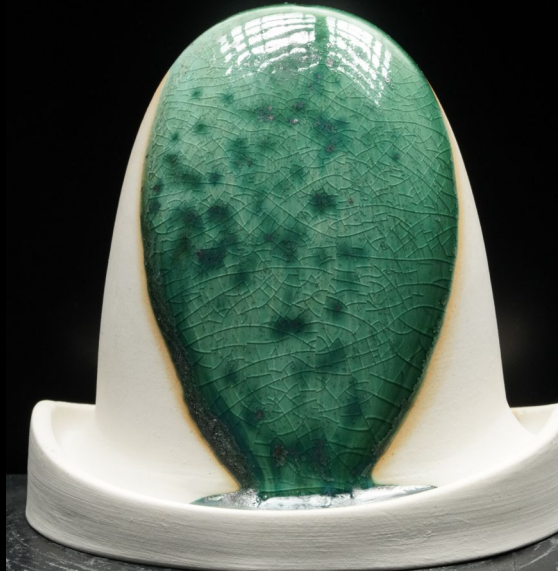
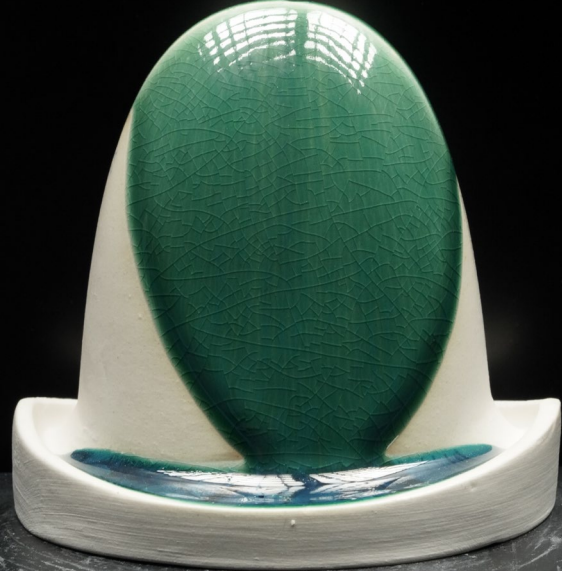
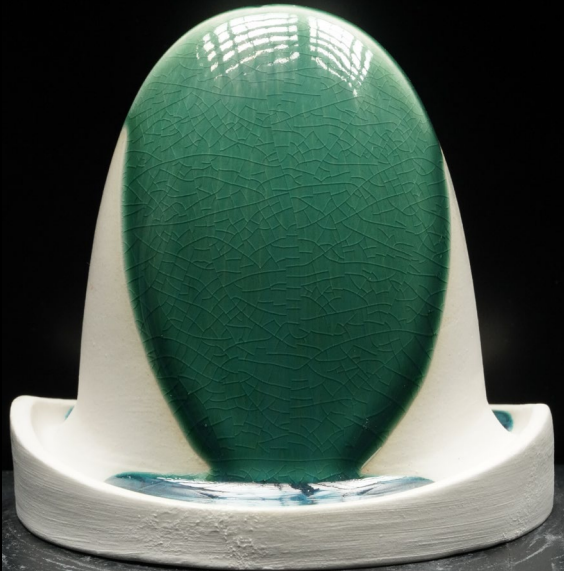


1-3 Second Dip



2-3 Second Dips

4%



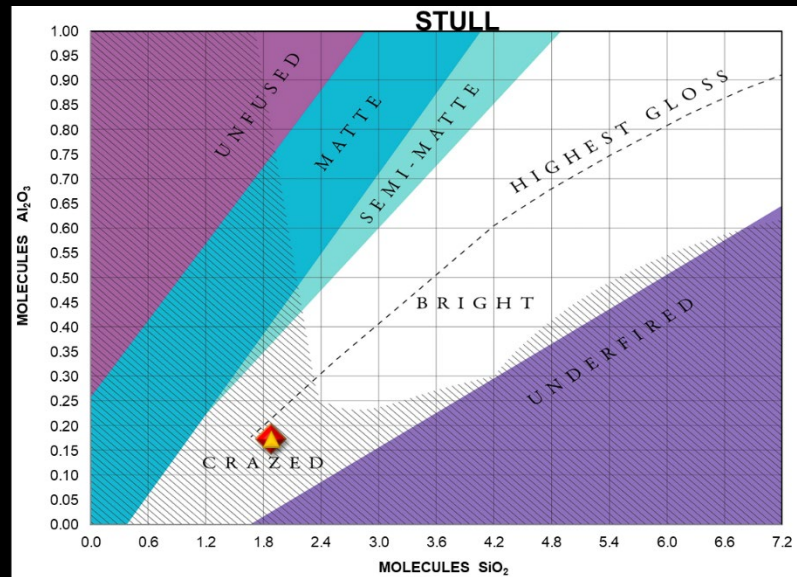
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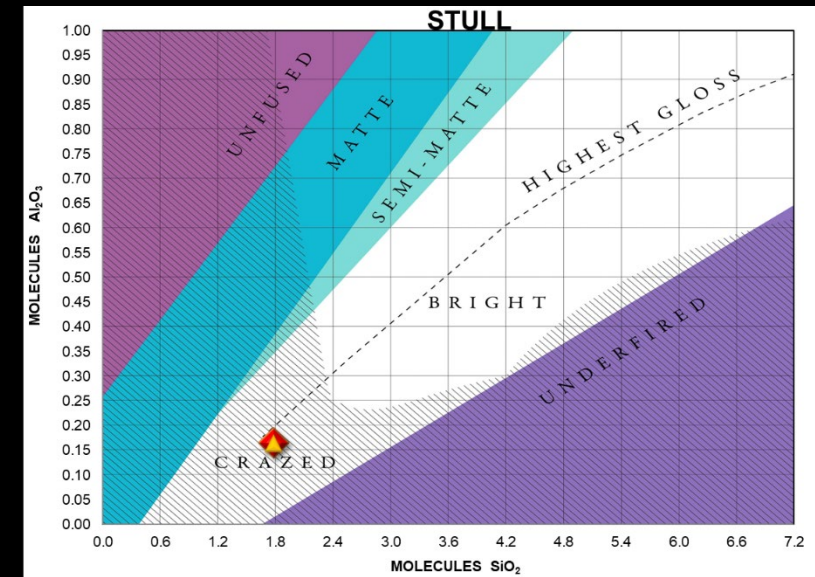
Copper Carbonate

SiO ₂ :Al ₂ O ₃ Ratio 10.78 :1		Alkali Metals 0.24		Alkaline Earths 0.76	
SiO ₂ 1.88	Collective "Al ₂ O ₃ " 0.17	Na ₂ O 0.20	K ₂ O 0.03	MgO 0.25	CaO 0.50
B ₂ O ₃ 0.19	Al ₂ O ₃ 0.17	Li ₂ O	CuO 0.02	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO

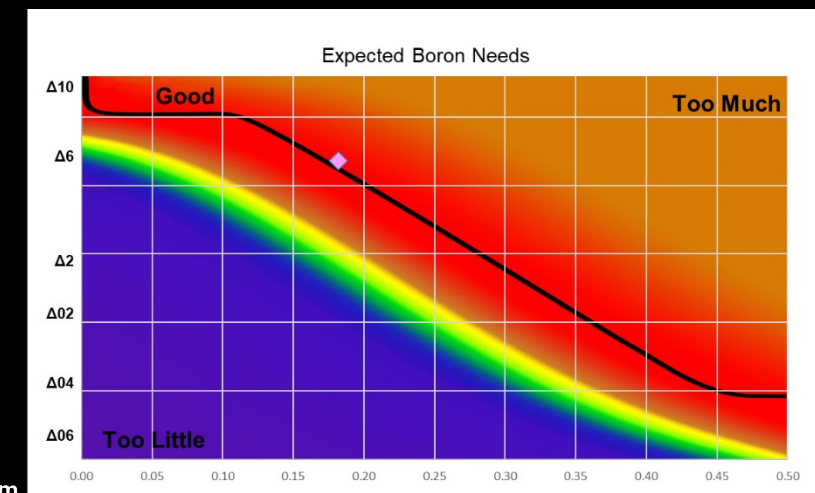


1%

SiO ₂ :Al ₂ O ₃ Ratio 10.78 :1		Alkali Metals 0.28		Alkaline Earths 0.72	
SiO ₂ 1.78	Collective "Al ₂ O ₃ " 0.17	Na ₂ O 0.19	K ₂ O 0.02	MgO 0.23	CaO 0.48
B ₂ O ₃ 0.18	Al ₂ O ₃ 0.16	Li ₂ O	CuO 0.07	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



4%



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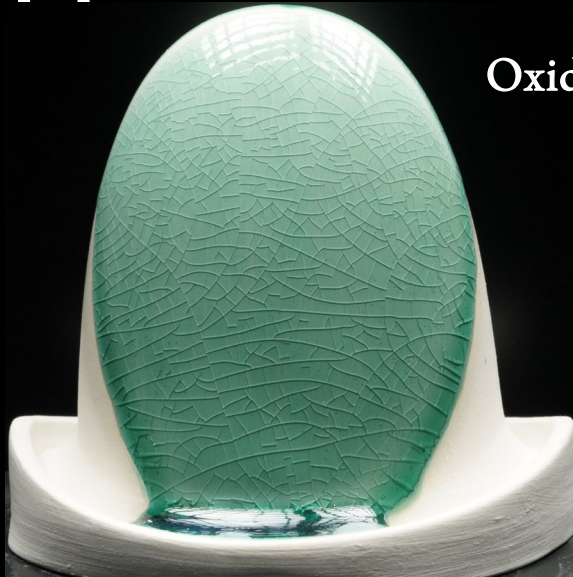
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Copper Oxide-Black

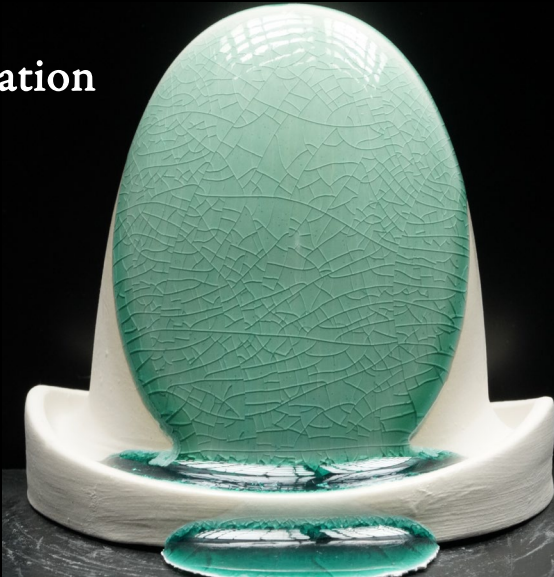
Oxidation

Reduction

1%



1-3 Second Dip



2-3 Second Dips

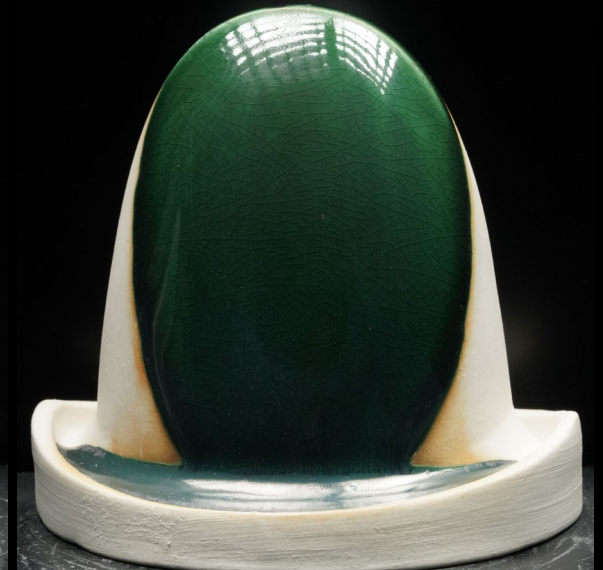
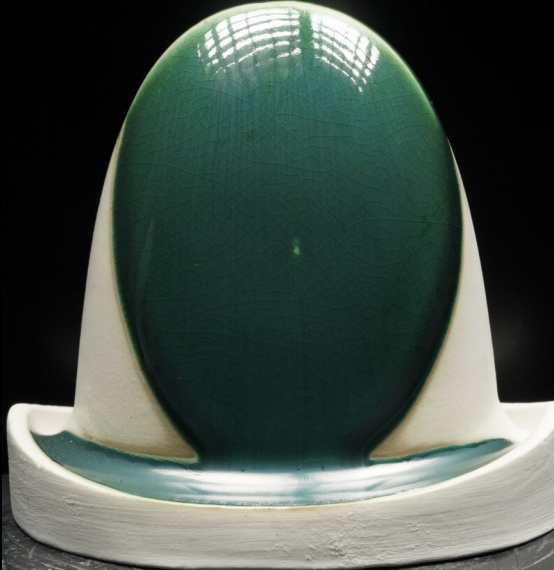
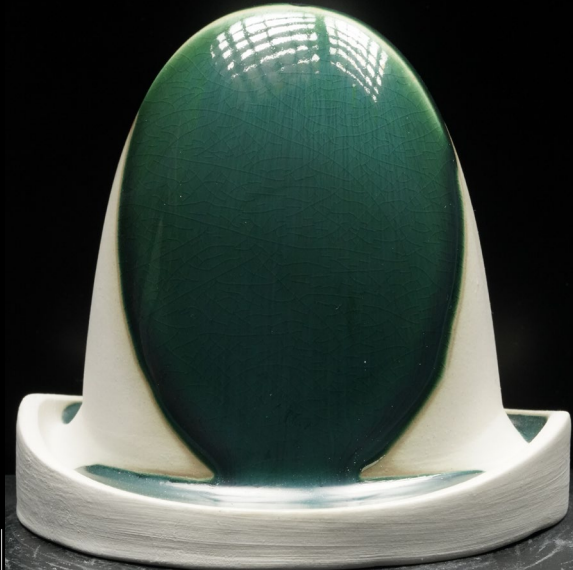


1-3 Second Dip



2-3 Second Dips

4%



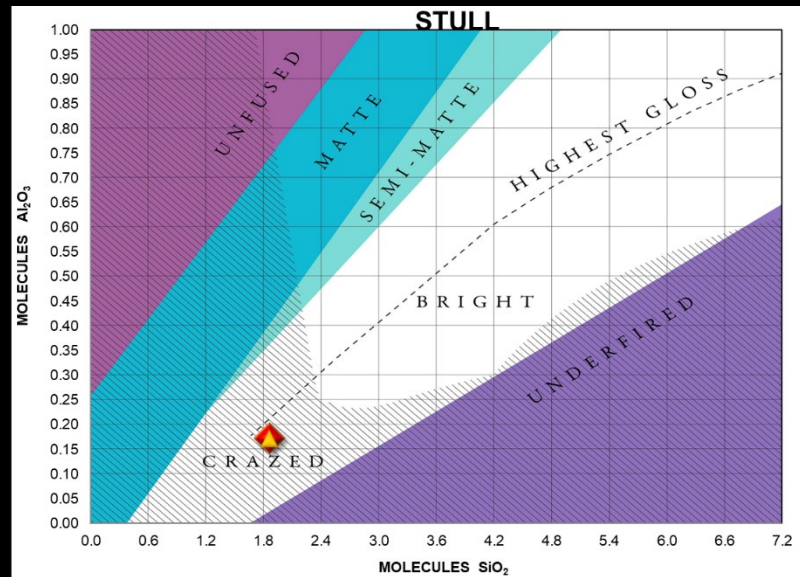
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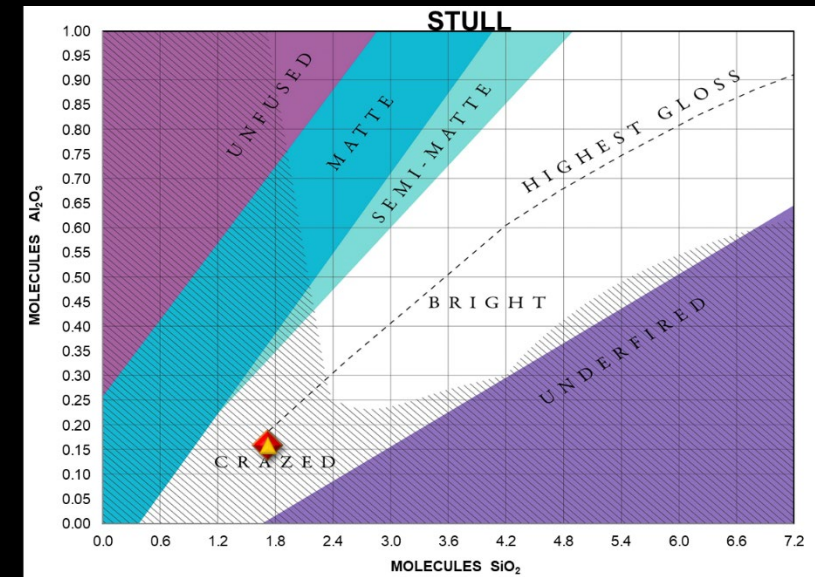
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Copper Oxide-Black

SiO ₂ :Al ₂ O ₃ Ratio 10.78 :1		Alkali Metals 0.25		Alkaline Earths 0.75	
SiO ₂ 1.86	Collective "Al ₂ O ₃ " 0.17	Na ₂ O 0.20	K ₂ O 0.03	MgO 0.25	CaO 0.50
B ₂ O ₃ 0.19	Al ₂ O ₃ 0.17	Li ₂ O	CuO 0.03	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



SiO ₂ :Al ₂ O ₃ Ratio 10.78 :1		Alkali Metals 0.31		Alkaline Earths 0.69	
SiO ₂ 1.72	Collective "Al ₂ O ₃ " 0.16	Na ₂ O 0.18	K ₂ O 0.02	MgO 0.23	CaO 0.46
B ₂ O ₃ 0.18	Al ₂ O ₃ 0.16	Li ₂ O	CuO 0.10	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



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Red Iron Oxide

Oxidation

Reduction

3%



1-3 Second Dip



2-3 Second Dips



1-3 Second Dip



2-3 Second Dips

9%



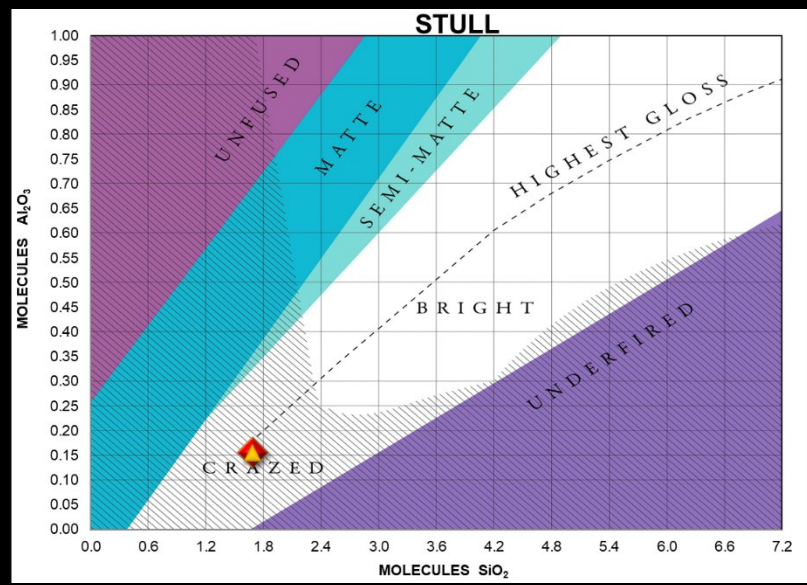
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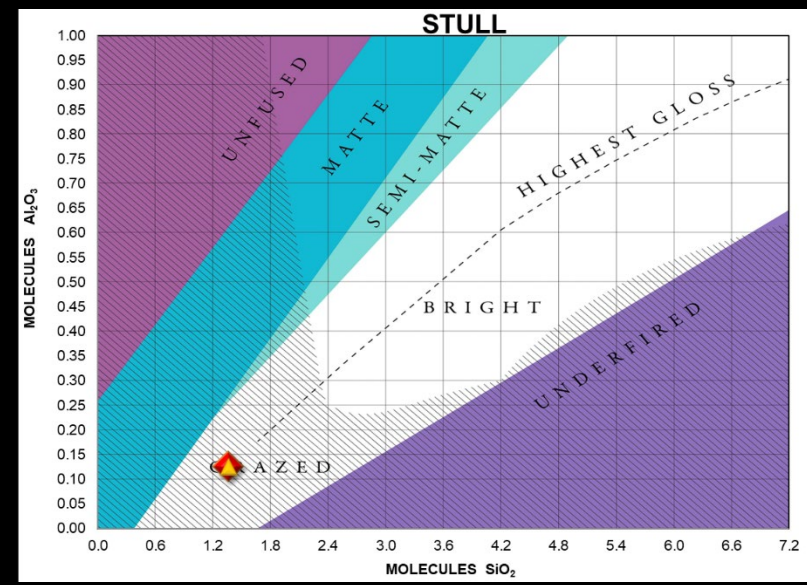
Red Iron Oxide

SiO ₂ :Al ₂ O ₃ Ratio 10.78 :1		Alkali Metals 0.20		Alkaline Earths 0.80	
SiO ₂ 1.69	Collective "Al ₂ O ₃ " 0.16	Na ₂ O 0.18	K ₂ O 0.02	MgO 0.22	CaO 0.45
B ₂ O ₃ 0.17	Al ₂ O ₃ 0.16	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.12
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO

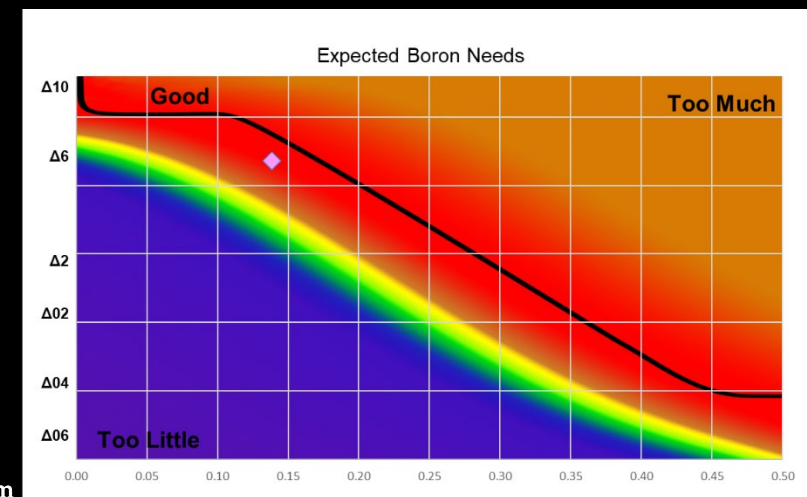


3%

SiO ₂ :Al ₂ O ₃ Ratio 10.78 :1		Alkali Metals 0.16		Alkaline Earths 0.84	
SiO ₂ 1.36	Collective "Al ₂ O ₃ " 0.13	Na ₂ O 0.15	K ₂ O 0.02	MgO 0.18	CaO 0.37
B ₂ O ₃ 0.14	Al ₂ O ₃ 0.13	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.29
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



9%



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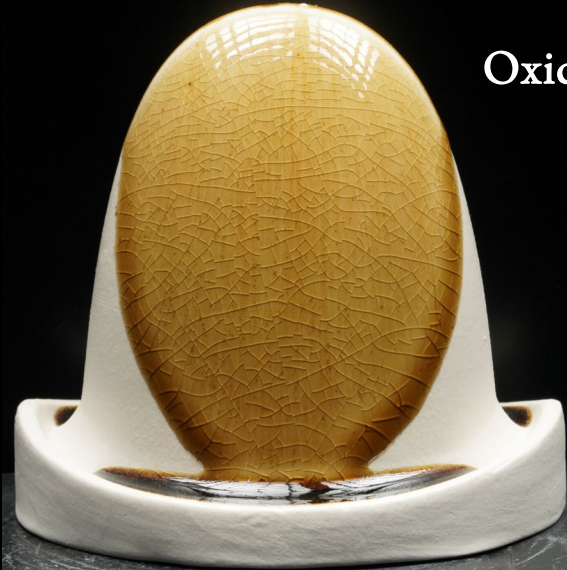
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Black Iron Oxide

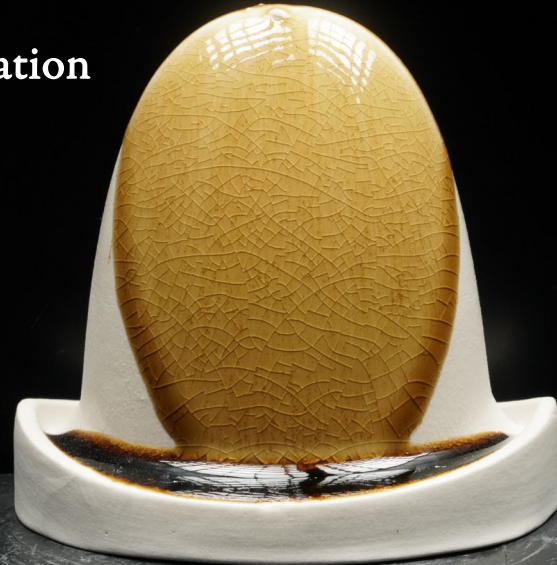
Oxidation

Reduction

3%



1-3 Second Dip



2-3 Second Dips



1-3 Second Dip



2-3 Second Dips

9%



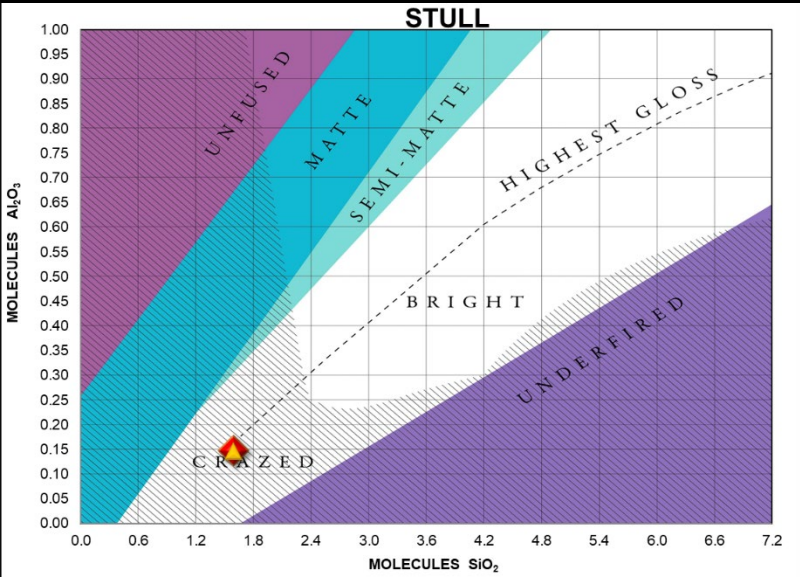
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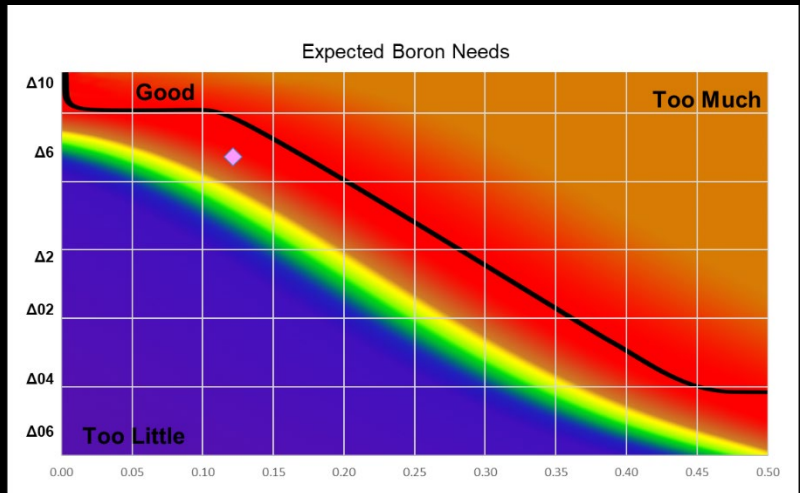
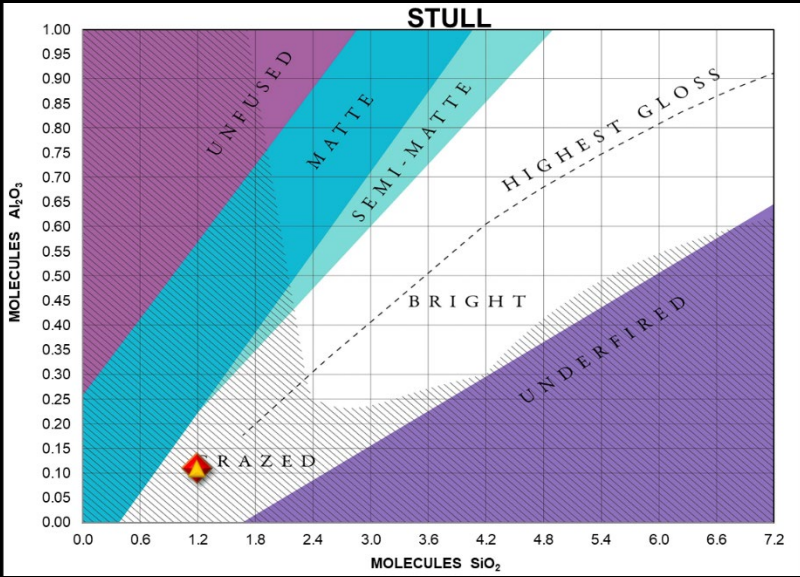
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Black Iron Oxide

SiO ₂ :Al ₂ O ₃ Ratio 10.78 :1		Alkali Metals 0.19		Alkaline Earths 0.81	
SiO ₂ 1.59	Collective "Al ₂ O ₃ " 0.15	Na ₂ O 0.17	K ₂ O 0.02	MgO 0.21	CaO 0.43
B ₂ O ₃ 0.16	Al ₂ O ₃ 0.15	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.17
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



SiO ₂ :Al ₂ O ₃ Ratio 10.78 :1		Alkali Metals 0.14		Alkaline Earths 0.86	
SiO ₂ 1.19	Collective "Al ₂ O ₃ " 0.11	Na ₂ O 0.13	K ₂ O 0.02	MgO 0.16	CaO 0.32
B ₂ O ₃ 0.12	Al ₂ O ₃ 0.11	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.38
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



Yellow Iron Oxide

3%

Oxidation

Reduction



1-3 Second Dip



2-3 Second Dips



1-3 Second Dip



2-3 Second Dips

9%



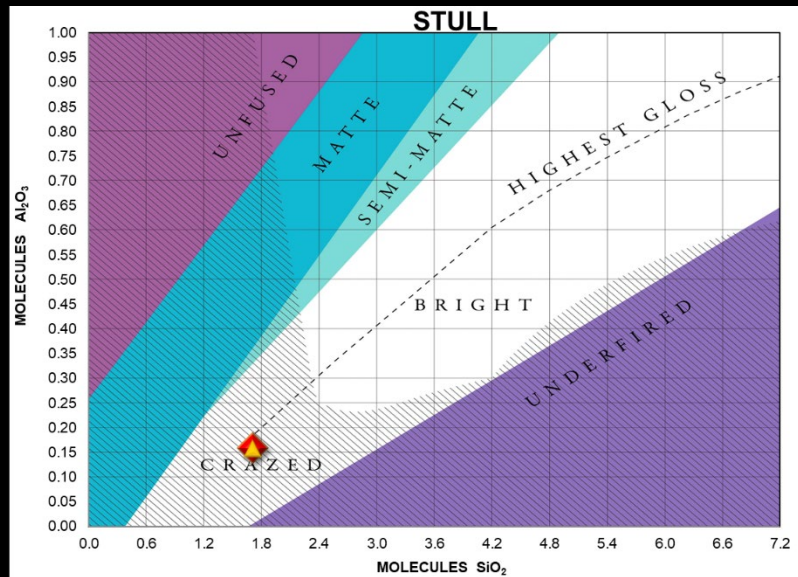
Ceramic
Materials
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Birdie's Nest - 070722

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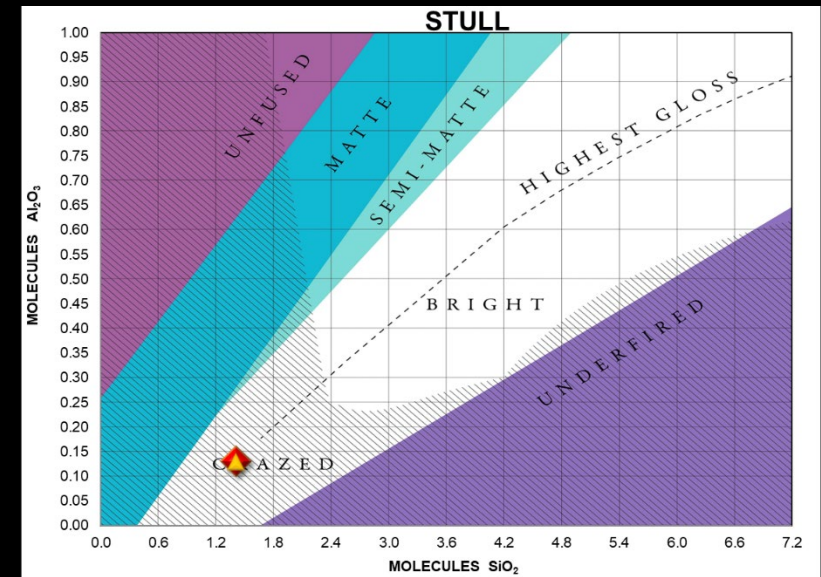
Yellow Iron Oxide

SiO ₂ :Al ₂ O ₃ Ratio 10.78 :1		Alkali Metals 0.21		Alkaline Earths 0.79	
SiO ₂ 1.71	Collective "Al ₂ O ₃ " 0.16	Na ₂ O 0.18	K ₂ O 0.02	MgO 0.23	CaO 0.46
B ₂ O ₃ 0.17	Al ₂ O ₃ 0.16	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.11
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO

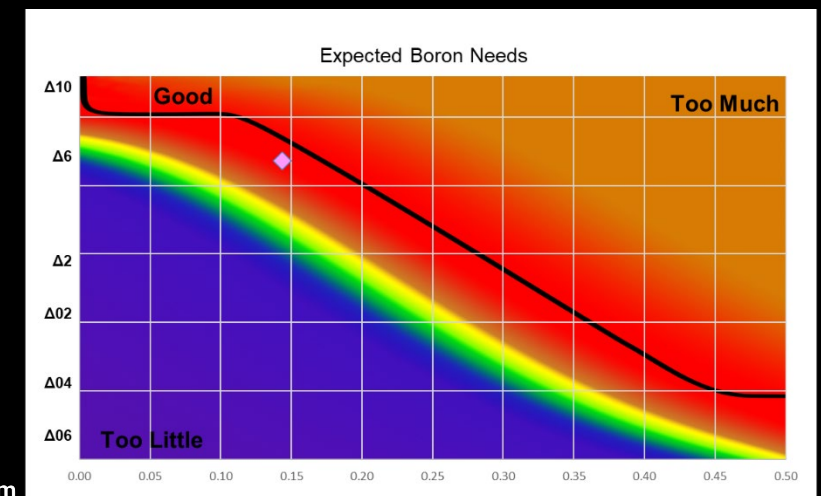


3%

SiO ₂ :Al ₂ O ₃ Ratio 10.78 :1		Alkali Metals 0.17		Alkaline Earths 0.83	
SiO ₂ 1.41	Collective "Al ₂ O ₃ " 0.13	Na ₂ O 0.15	K ₂ O 0.02	MgO 0.19	CaO 0.38
B ₂ O ₃ 0.14	Al ₂ O ₃ 0.13	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.27
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



9%



Manganese Dioxide

Oxidation

Reduction

1%



1-3 Second Dip



2-3 Second Dips



1-3 Second Dip



2-3 Second Dips

4%



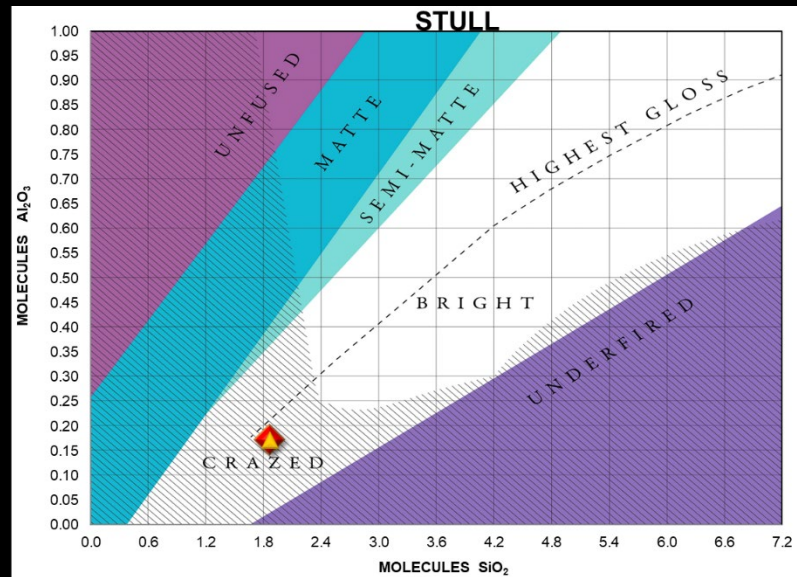
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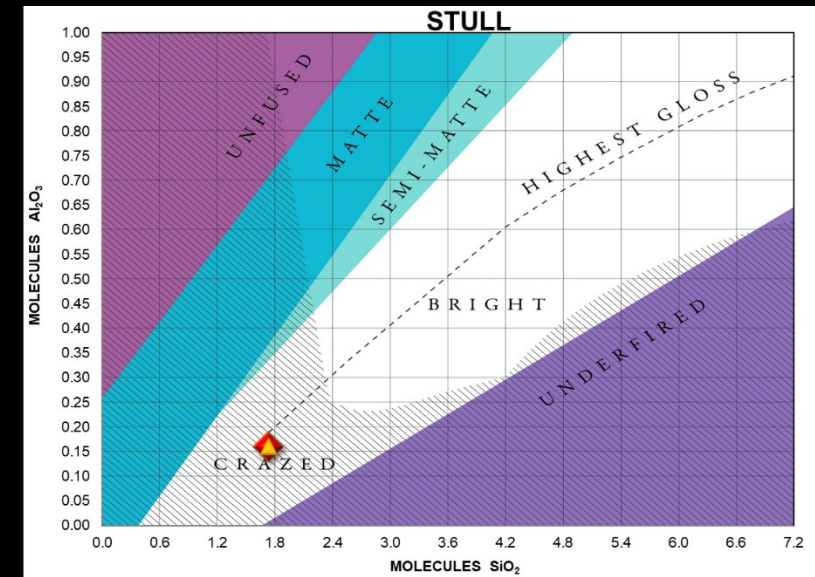
Manganese Dioxide

SiO ₂ :Al ₂ O ₃ Ratio 10.78 :1		Alkali Metals 0.23		Alkaline Earths 0.77	
SiO ₂ 1.87	Collective "Al ₂ O ₃ " 0.17	Na ₂ O 0.20	K ₂ O 0.03	MgO 0.25	CaO 0.50
B ₂ O ₃ 0.19	Al ₂ O ₃ 0.17	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂ 0.03	CoO

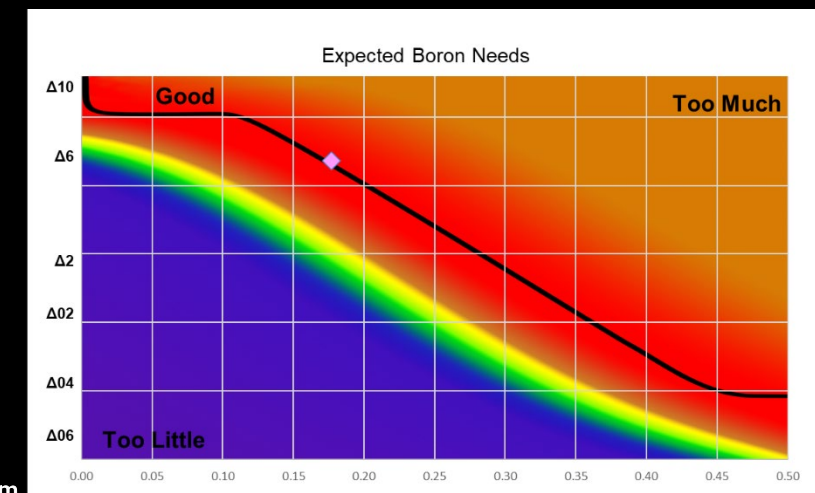
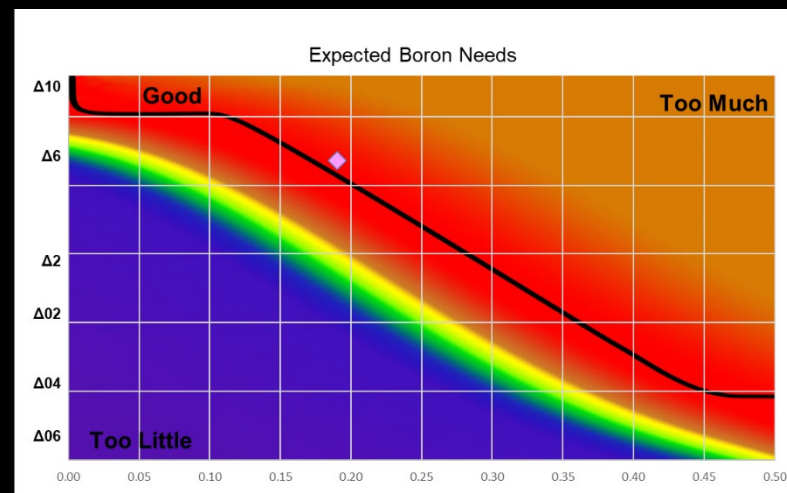


1%

SiO ₂ :Al ₂ O ₃ Ratio 10.78 :1		Alkali Metals 0.21		Alkaline Earths 0.79	
SiO ₂ 1.73	Collective "Al ₂ O ₃ " 0.16	Na ₂ O 0.19	K ₂ O 0.02	MgO 0.23	CaO 0.47
B ₂ O ₃ 0.18	Al ₂ O ₃ 0.16	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂ 0.09	CoO



4%



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Vanadium Pentoxide

Oxidation

Reduction

3%



1-3 Second Dip



2-3 Second Dips



1-3 Second Dip



2-3 Second Dips

9%



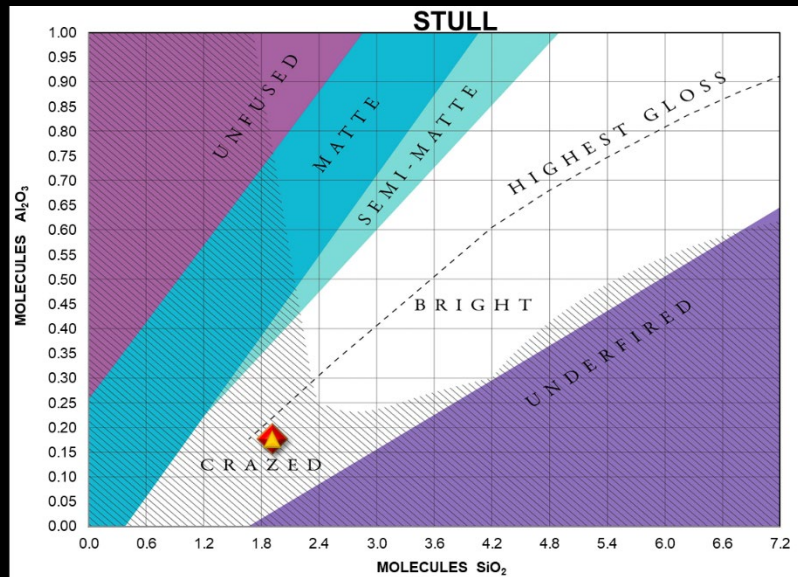
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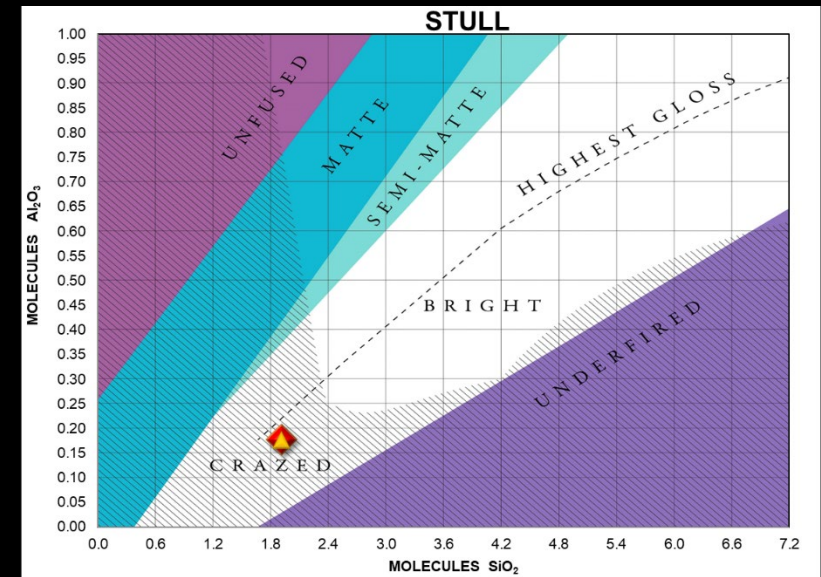
Vanadium Pentoxide

SiO ₂ :Al ₂ O ₃ Ratio 10.78 :1		Alkali Metals 0.23		Alkaline Earths 0.77	
SiO ₂ 1.91	Collective "Al ₂ O ₃ " 0.18	Na ₂ O 0.20	K ₂ O 0.03	MgO 0.25	CaO 0.51
B ₂ O ₃ 0.20	Al ₂ O ₃ 0.18	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO

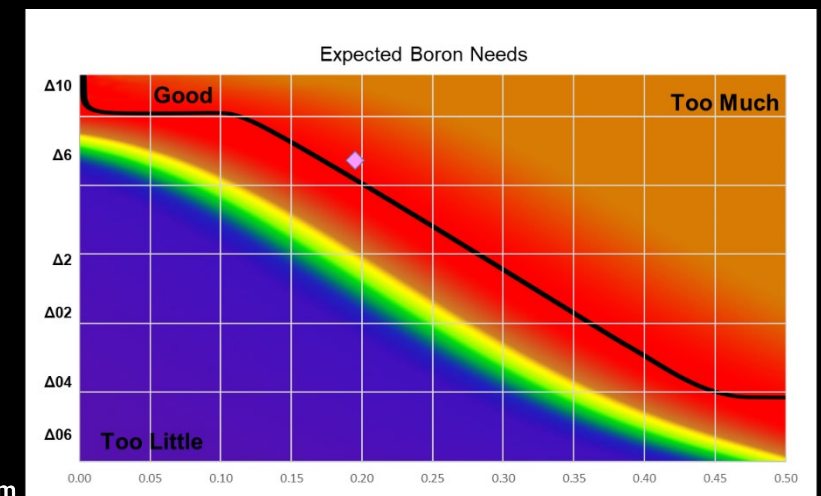


3%

SiO ₂ :Al ₂ O ₃ Ratio 10.78 :1		Alkali Metals 0.23		Alkaline Earths 0.77	
SiO ₂ 1.91	Collective "Al ₂ O ₃ " 0.18	Na ₂ O 0.20	K ₂ O 0.03	MgO 0.25	CaO 0.51
B ₂ O ₃ 0.20	Al ₂ O ₃ 0.18	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



9%



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Dark Rutile

Oxidation

Reduction

3%

1-3 Second Dip

2-3 Second Dips

1-3 Second Dip

2-3 Second Dips

9%



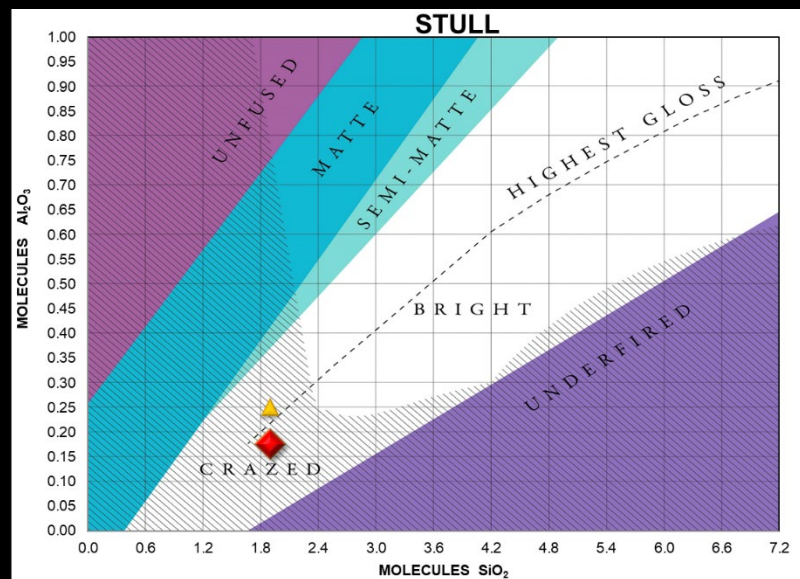
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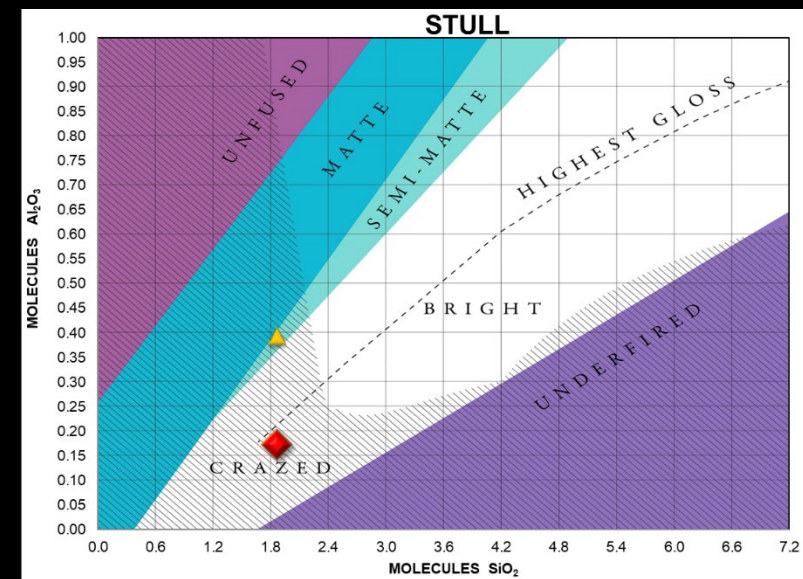
Dark Rutile

SiO ₂ :Al ₂ O ₃ Ratio 7.57 :1		Alkali Metals 0.23		Alkaline Earths 0.77	
SiO ₂ 1.90	Collective "Al ₂ O ₃ " 0.25	Na ₂ O 0.20	K ₂ O 0.03	MgO 0.25	CaO 0.51
B ₂ O ₃ 0.19	Al ₂ O ₃ 0.18	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.08	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.01
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO

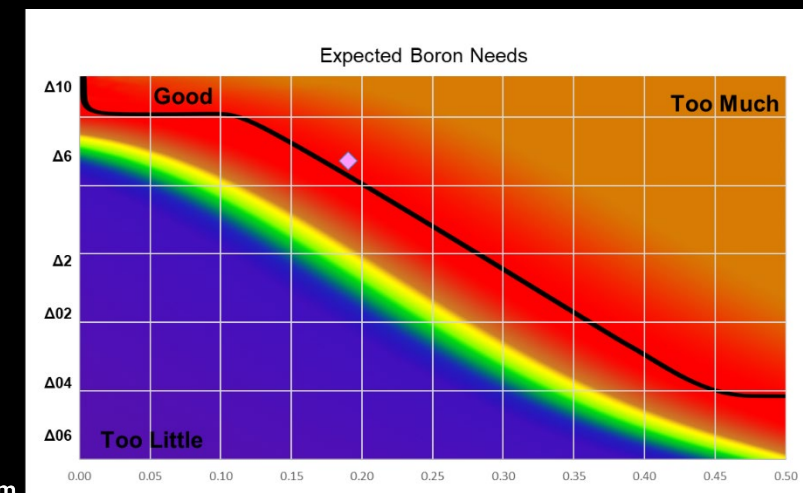


3%

SiO ₂ :Al ₂ O ₃ Ratio 4.74 :1		Alkali Metals 0.23		Alkaline Earths 0.77	
SiO ₂ 1.87	Collective "Al ₂ O ₃ " 0.39	Na ₂ O 0.20	K ₂ O 0.03	MgO 0.25	CaO 0.50
B ₂ O ₃ 0.19	Al ₂ O ₃ 0.17	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.22	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.03
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



9%



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Light Rutile

Oxidation

Reduction

3%



1-3 Second Dip



2-3 Second Dips



1-3 Second Dip



2-3 Second Dips

9%



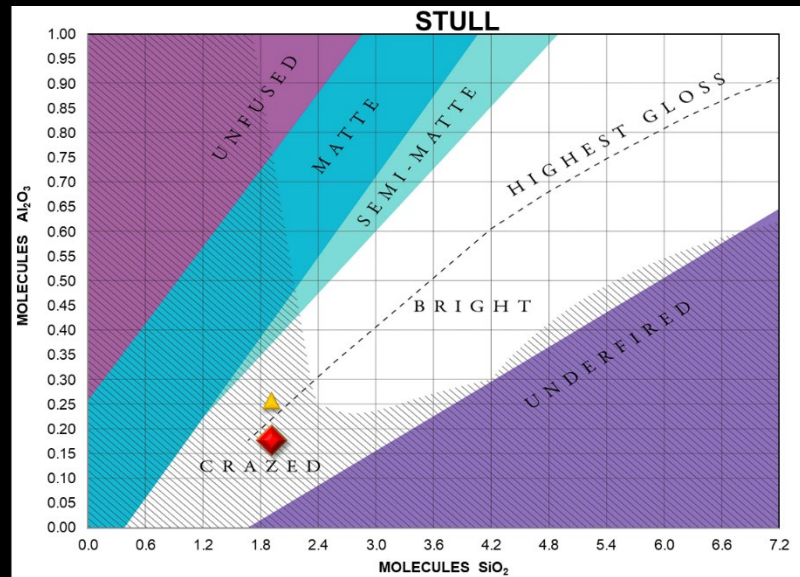
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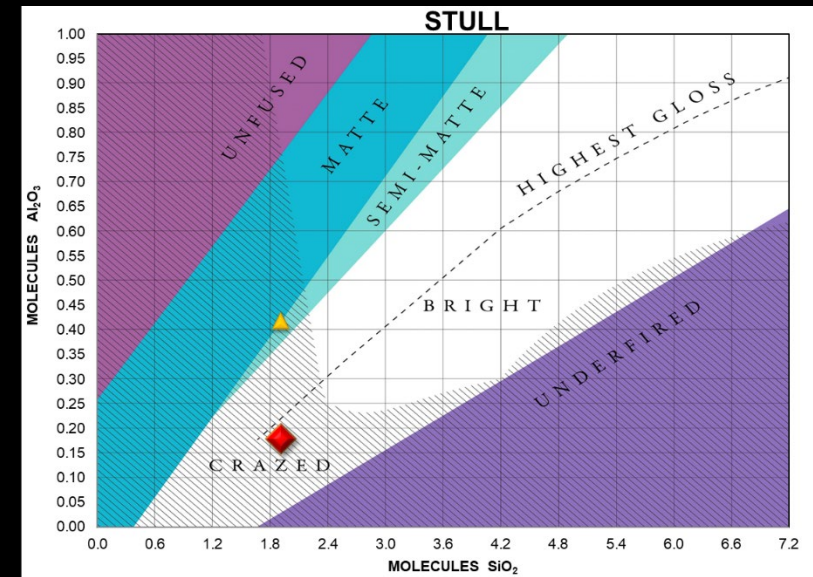
Light Rutile

SiO ₂ :Al ₂ O ₃ Ratio 7.41 :1		Alkali Metals 0.23		Alkaline Earths 0.77	
SiO ₂ 1.91	Collective "Al ₂ O ₃ " 0.26	Na ₂ O 0.20	K ₂ O 0.03	MgO 0.25	CaO 0.51
B ₂ O ₃ 0.19	Al ₂ O ₃ 0.18	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.08	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



3%

SiO ₂ :Al ₂ O ₃ Ratio 4.56 :1		Alkali Metals 0.23		Alkaline Earths 0.77	
SiO ₂ 1.91	Collective "Al ₂ O ₃ " 0.42	Na ₂ O 0.20	K ₂ O 0.03	MgO 0.25	CaO 0.51
B ₂ O ₃ 0.19	Al ₂ O ₃ 0.18	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.24	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



9%



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Titanium Dioxide

Oxidation

Reduction

3%



1-3 Second Dip



2-3 Second Dips



1-3 Second Dip



2-3 Second Dips

9%



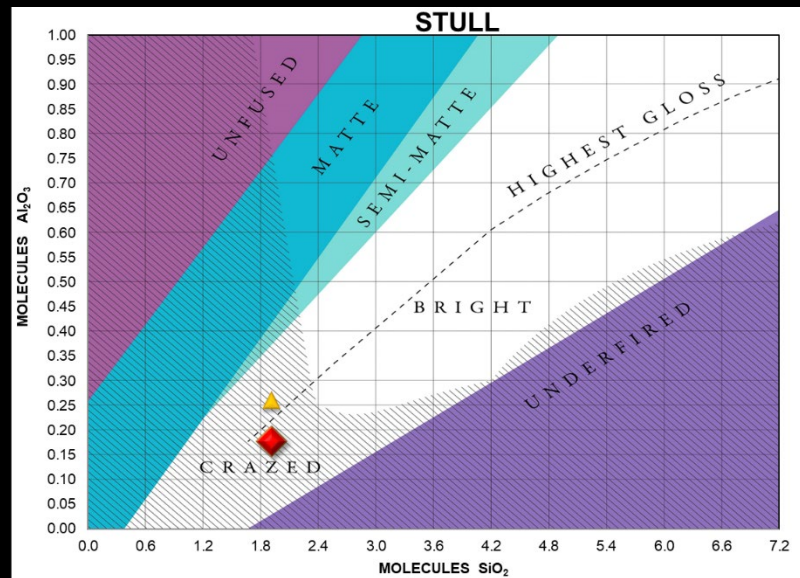
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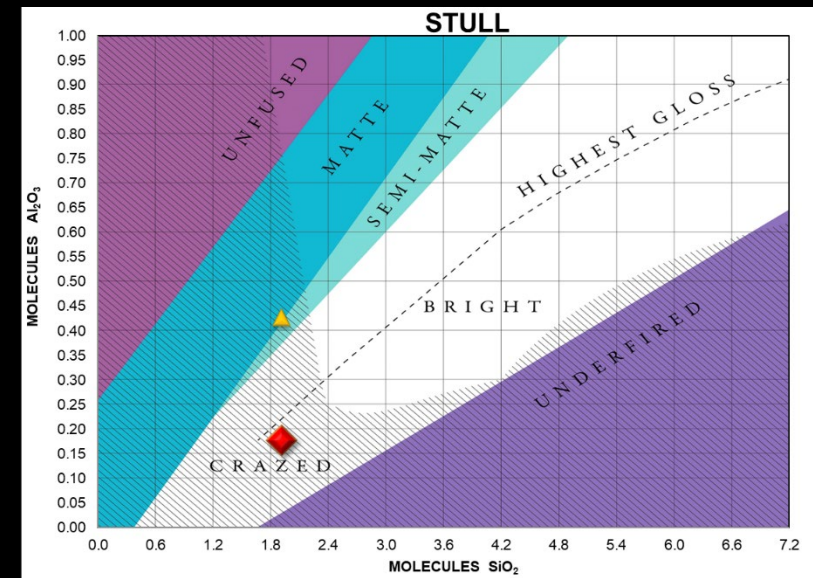
Titanium Dioxide

SiO ₂ :Al ₂ O ₃ Ratio 7.32 :1		Alkali Metals 0.23		Alkaline Earths 0.77	
SiO ₂ 1.91	Collective "Al ₂ O ₃ " 0.26	Na ₂ O 0.20	K ₂ O 0.03	MgO 0.25	CaO 0.51
B ₂ O ₃ 0.20	Al ₂ O ₃ 0.18	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.08	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO

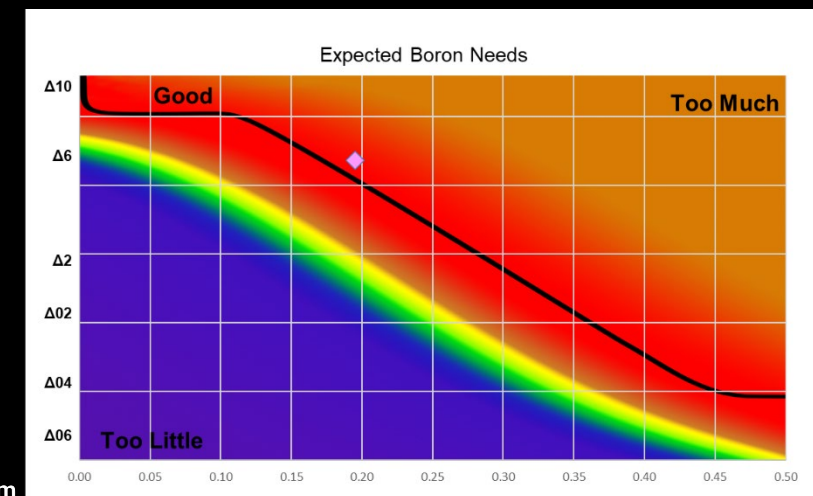


3%

SiO ₂ :Al ₂ O ₃ Ratio 4.46 :1		Alkali Metals 0.23		Alkaline Earths 0.77	
SiO ₂ 1.91	Collective "Al ₂ O ₃ " 0.43	Na ₂ O 0.20	K ₂ O 0.03	MgO 0.25	CaO 0.51
B ₂ O ₃ 0.20	Al ₂ O ₃ 0.18	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.25	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



9%



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Nickel Carbonate

Oxidation

Reduction

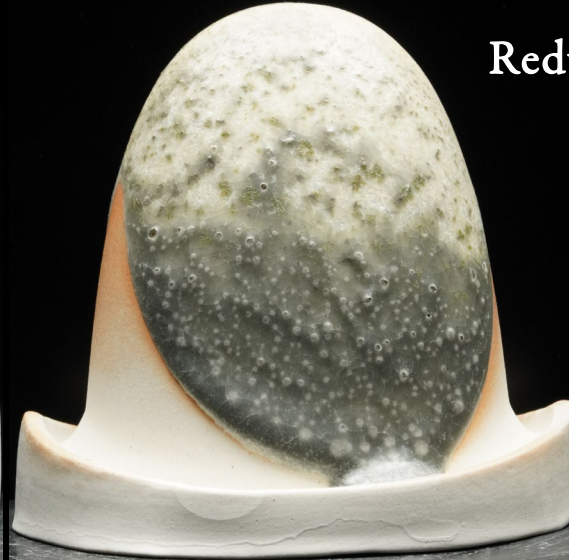
2%



1-3 Second Dip



2-3 Second Dips



1-3 Second Dip



2-3 Second Dips

6%



1-3 Second Dip



2-3 Second Dips



1-3 Second Dip



2-3 Second Dips



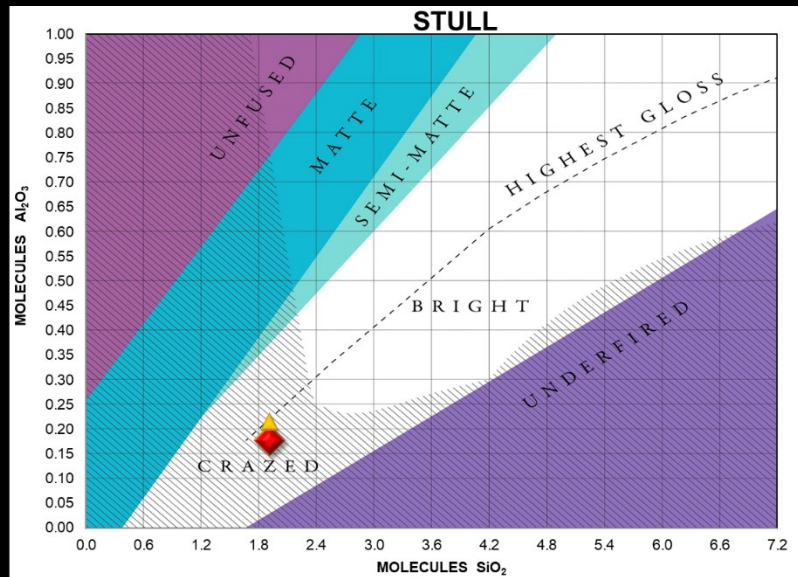
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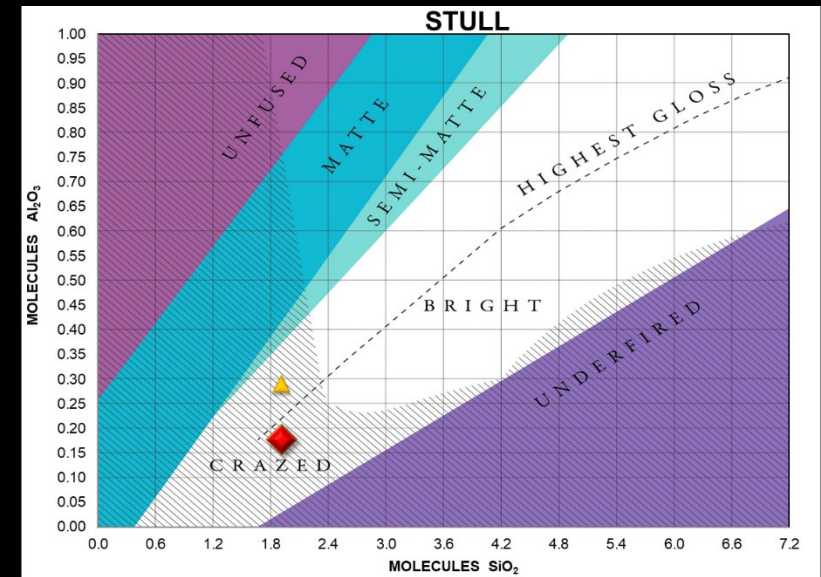
Nickel Carbonate

SiO ₂ :Al ₂ O ₃ Ratio 8.88 :1		Alkali Metals 0.23		Alkaline Earths 0.77	
SiO ₂ 1.91	Collective "Al ₂ O ₃ " 0.22	Na ₂ O 0.20	K ₂ O 0.03	MgO 0.25	CaO 0.51
B ₂ O ₃ 0.20	Al ₂ O ₃ 0.18	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO 0.04	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO

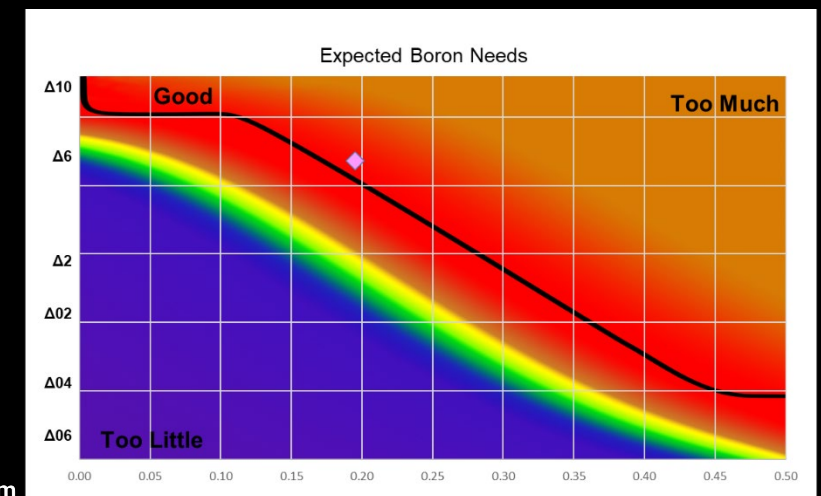


2%

SiO ₂ :Al ₂ O ₃ Ratio 6.56 :1		Alkali Metals 0.23		Alkaline Earths 0.77	
SiO ₂ 1.91	Collective "Al ₂ O ₃ " 0.29	Na ₂ O 0.20	K ₂ O 0.03	MgO 0.25	CaO 0.51
B ₂ O ₃ 0.20	Al ₂ O ₃ 0.18	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO 0.11	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



6%



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Nickel Oxide-Black

Oxidation

Reduction

2%



1-3 Second Dip



2-3 Second Dips



1-3 Second Dip



2-3 Second Dips

6%



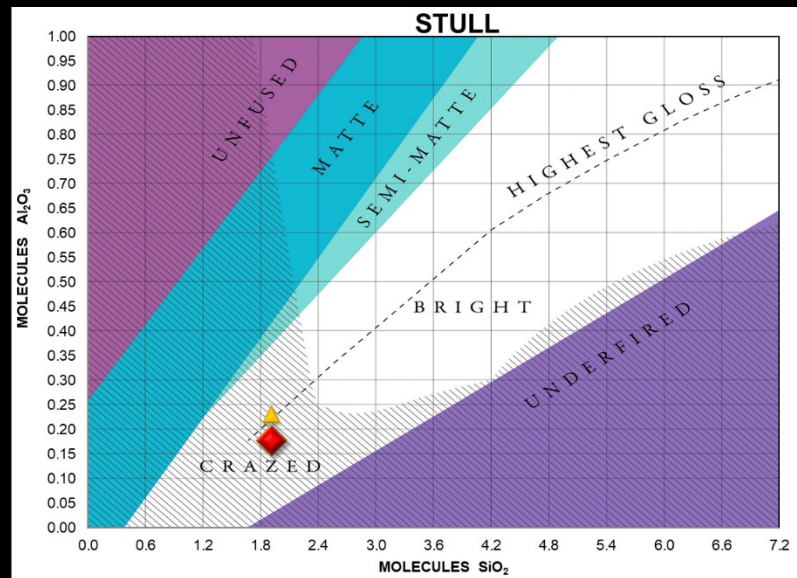
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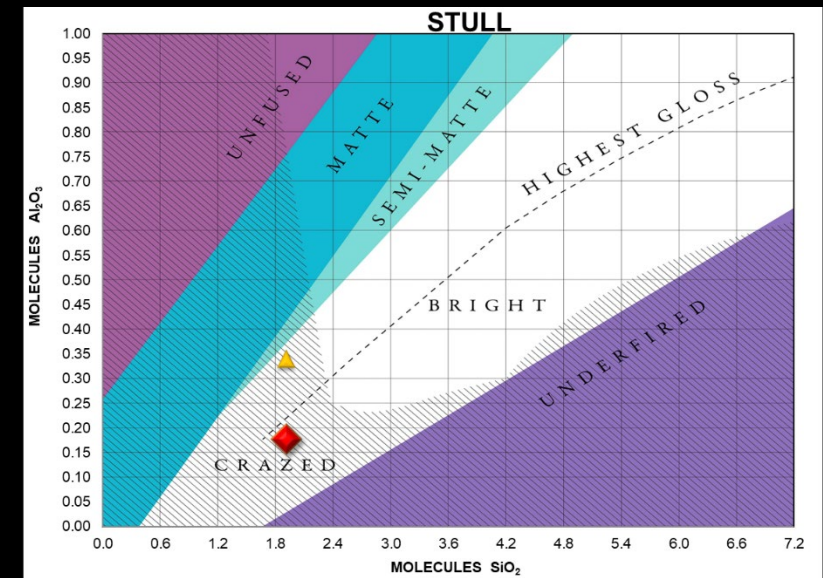
Nickel Oxide-Black

SiO ₂ :Al ₂ O ₃ Ratio 8.25 :1		Alkali Metals 0.23		Alkaline Earths 0.77	
SiO ₂ 1.91	Collective "Al ₂ O ₃ " 0.23	Na ₂ O 0.20	K ₂ O 0.03	MgO 0.25	CaO 0.51
B ₂ O ₃ 0.20	Al ₂ O ₃ 0.18	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO 0.05	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO

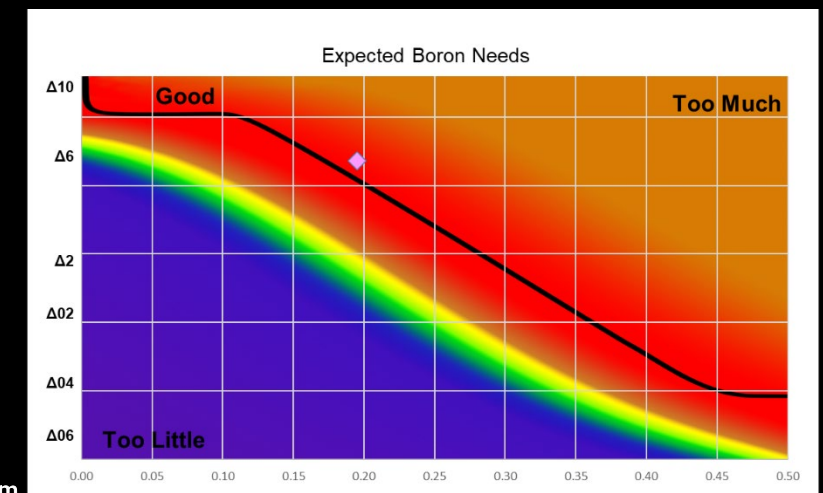
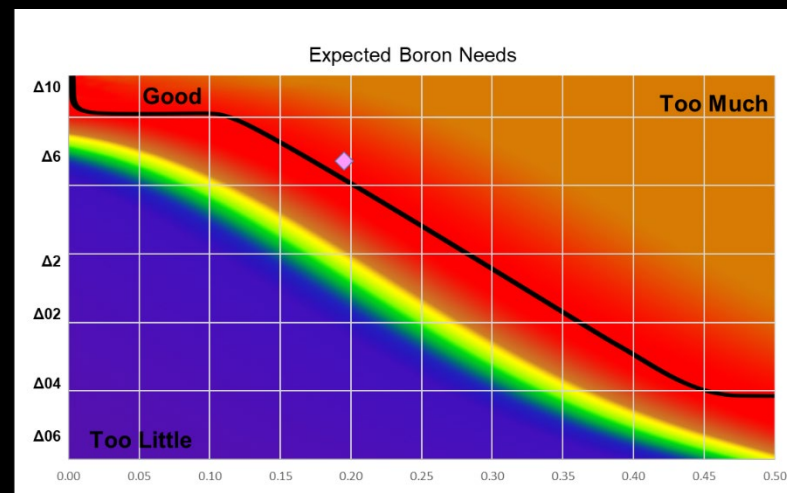


2%

SiO ₂ :Al ₂ O ₃ Ratio 5.62 :1		Alkali Metals 0.23		Alkaline Earths 0.77	
SiO ₂ 1.91	Collective "Al ₂ O ₃ " 0.34	Na ₂ O 0.20	K ₂ O 0.03	MgO 0.25	CaO 0.51
B ₂ O ₃ 0.20	Al ₂ O ₃ 0.18	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO 0.16	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



6%



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Tin Oxide

Oxidation

Reduction

3%



1-3 Second Dip



2-3 Second Dips



1-3 Second Dip



2-3 Second Dips

6%



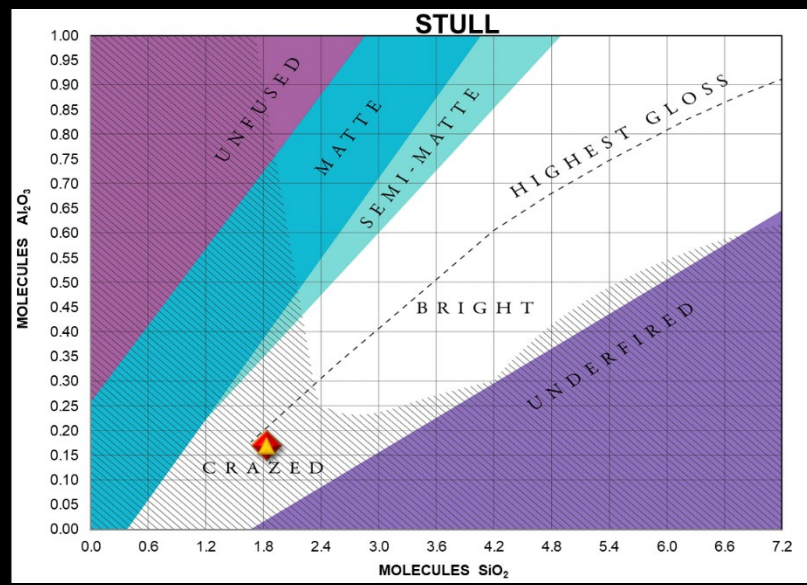
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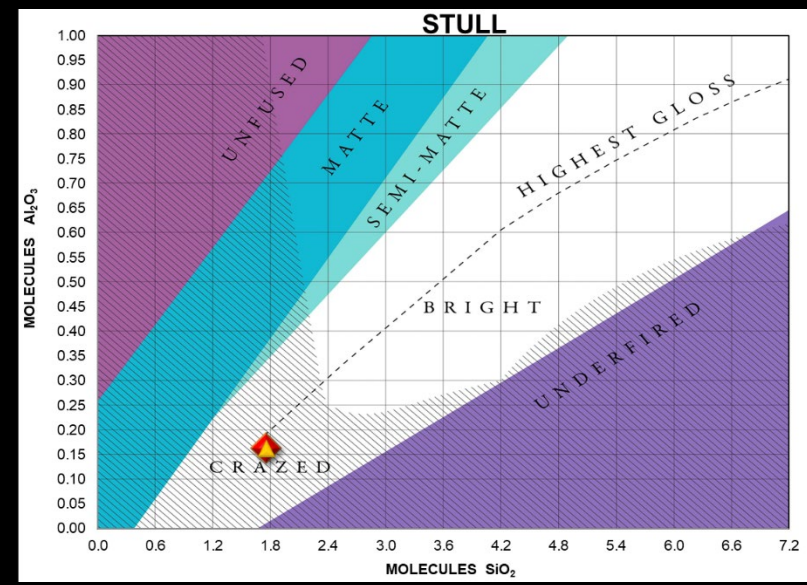
Tin Oxide

SiO ₂ :Al ₂ O ₃ Ratio 10.78 :1		Alkali Metals 0.26		Alkaline Earths 0.74	
SiO ₂ 1.83	Collective "Al ₂ O ₃ " 0.17	Na ₂ O 0.20	K ₂ O 0.03	MgO 0.24	CaO 0.49
B ₂ O ₃ 0.19	Al ₂ O ₃ 0.17	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂ 0.04	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



3%

SiO ₂ :Al ₂ O ₃ Ratio 10.78 :1		Alkali Metals 0.29		Alkaline Earths 0.71	
SiO ₂ 1.76	Collective "Al ₂ O ₃ " 0.16	Na ₂ O 0.19	K ₂ O 0.02	MgO 0.23	CaO 0.47
B ₂ O ₃ 0.18	Al ₂ O ₃ 0.16	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂ 0.08	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



6%



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Zirconium Silicate

Oxidation

Reduction

5%



1-3 Second Dip



2-3 Second Dips



1-3 Second Dip



2-3 Second Dips

10%



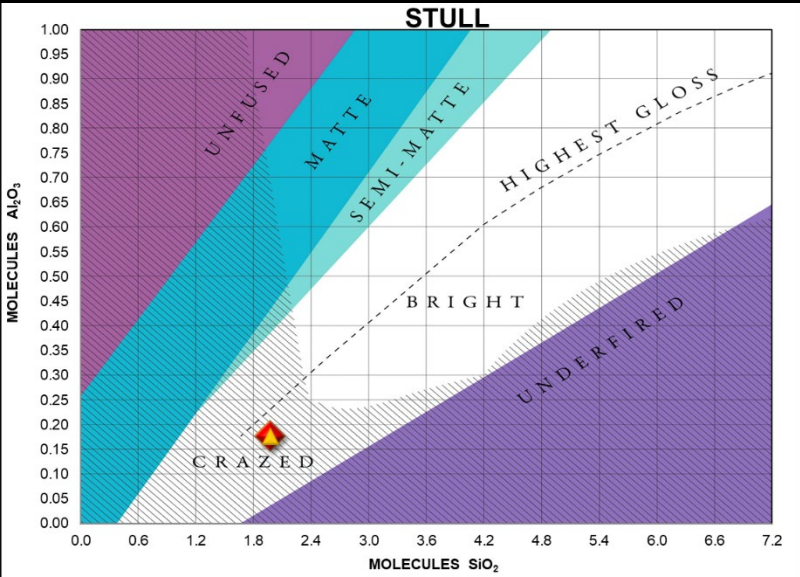
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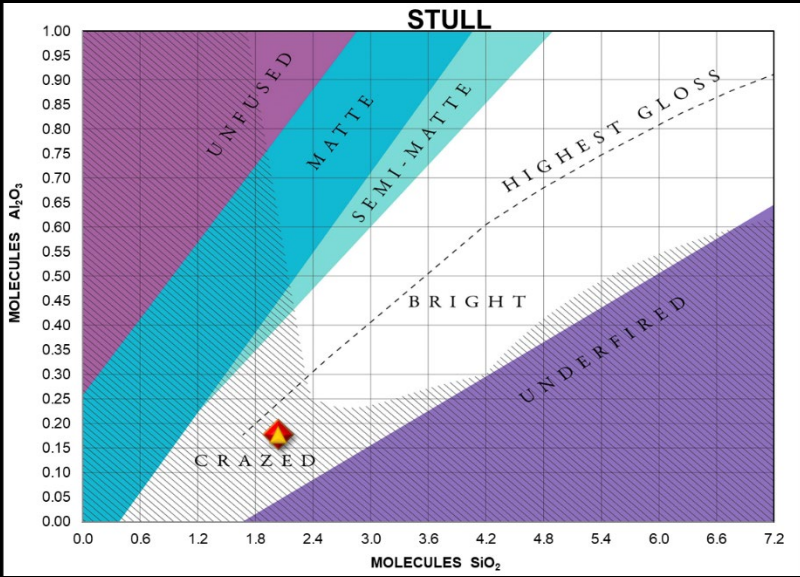
Zirconium Silicate

SiO ₂ :Al ₂ O ₃ Ratio 11.13 :1		Alkali Metals 0.23		Alkaline Earths 0.77	
SiO ₂ 1.98	Collective "Al ₂ O ₃ " 0.18	Na ₂ O 0.20	K ₂ O 0.03	MgO 0.25	CaO 0.51
B ₂ O ₃ 0.20	Al ₂ O ₃ 0.18	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO

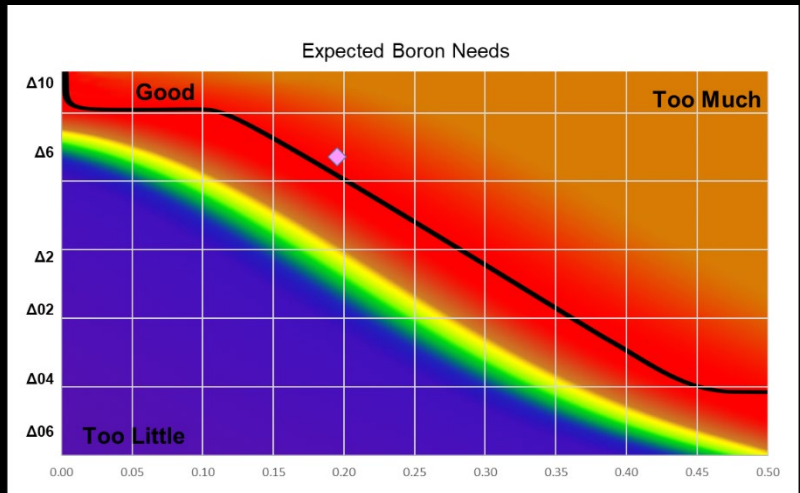


5%

SiO ₂ :Al ₂ O ₃ Ratio 11.47 :1		Alkali Metals 0.23		Alkaline Earths 0.77	
SiO ₂ 2.04	Collective "Al ₂ O ₃ " 0.18	Na ₂ O 0.20	K ₂ O 0.03	MgO 0.25	CaO 0.51
B ₂ O ₃ 0.20	Al ₂ O ₃ 0.18	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



10%



Ceramic
Materials
Workshop

Stain Dark Red 6021

Oxidation

Reduction

5%



1-3 Second Dip



2-3 Second Dips



1-3 Second Dip



2-3 Second Dips

10%



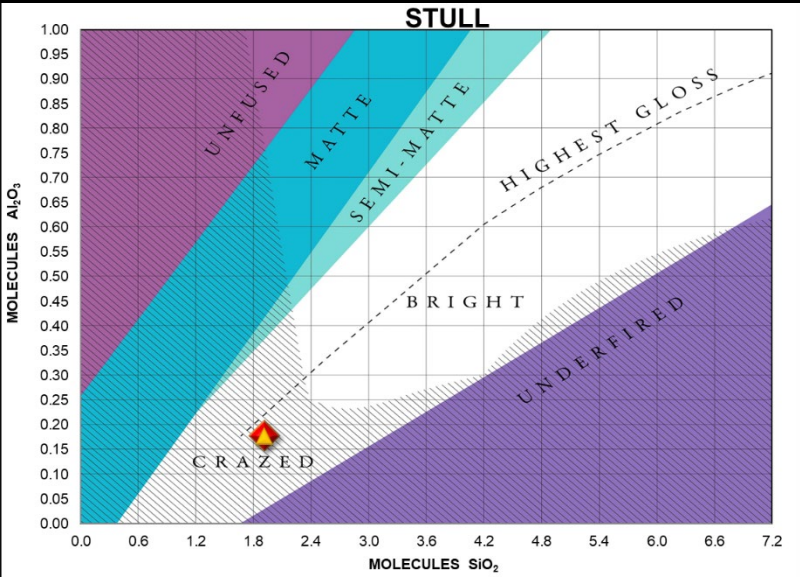
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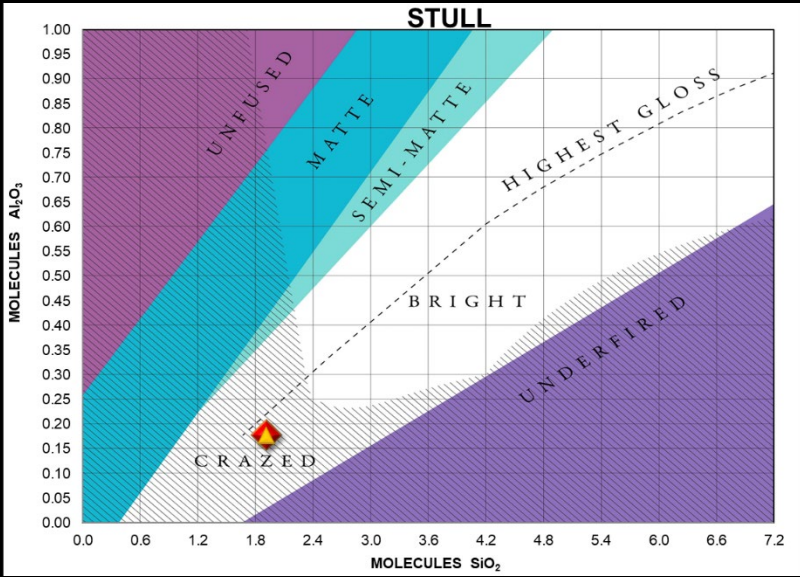
Stain Dark Red 6021

SiO ₂ :Al ₂ O ₃ Ratio 10.78 :1		Alkali Metals 0.23		Alkaline Earths 0.77	
SiO ₂ 1.91	Collective "Al ₂ O ₃ " 0.18	Na ₂ O 0.20	K ₂ O 0.03	MgO 0.25	CaO 0.51
B ₂ O ₃ 0.20	Al ₂ O ₃ 0.18	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO

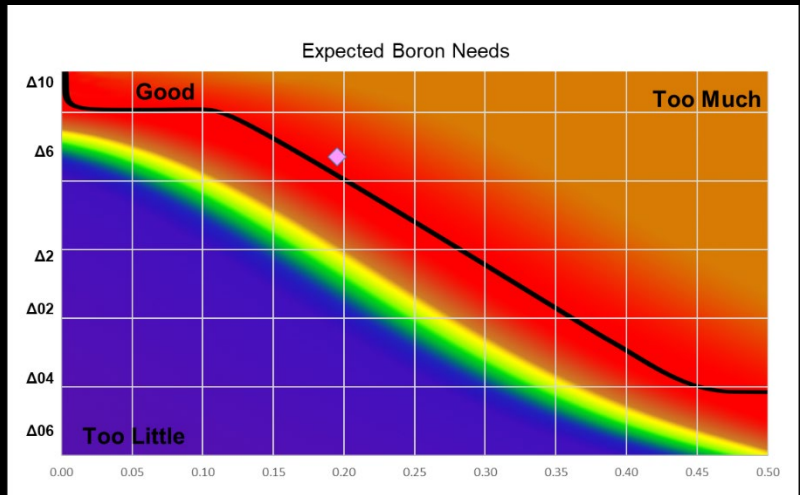
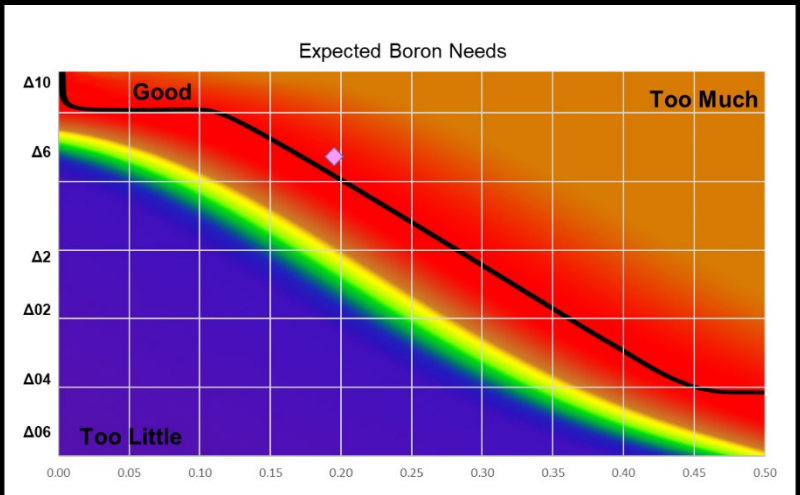


5%

SiO ₂ :Al ₂ O ₃ Ratio 10.78 :1		Alkali Metals 0.23		Alkaline Earths 0.77	
SiO ₂ 1.91	Collective "Al ₂ O ₃ " 0.18	Na ₂ O 0.20	K ₂ O 0.03	MgO 0.25	CaO 0.51
B ₂ O ₃ 0.20	Al ₂ O ₃ 0.18	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



10%



Silicon Carbide-30 Mesh

Oxidation

Reduction

3%



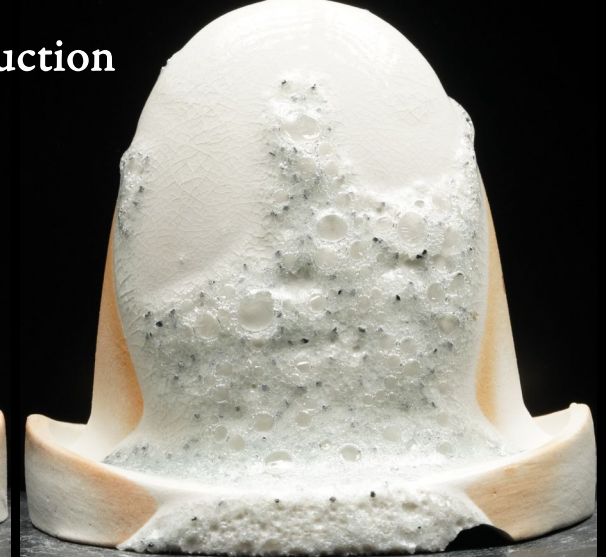
1-3 Second Dip



2-3 Second Dips



1-3 Second Dip



2-3 Second Dips

9%



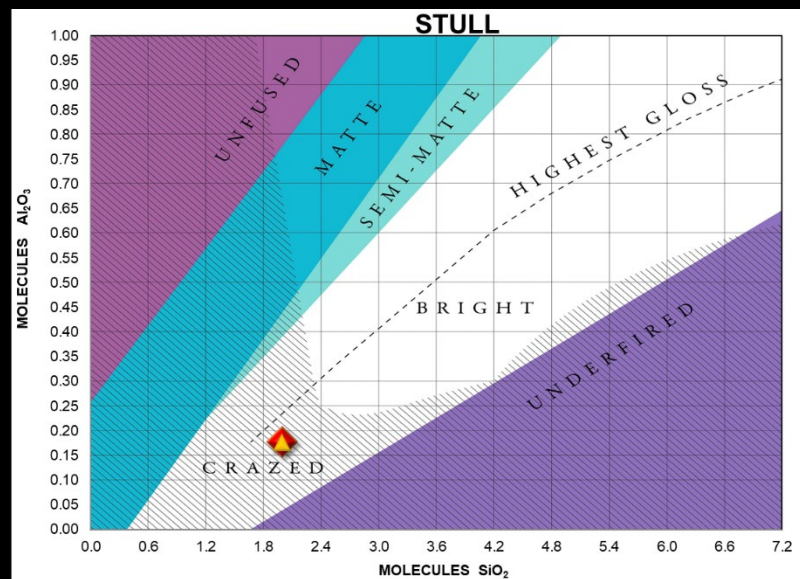
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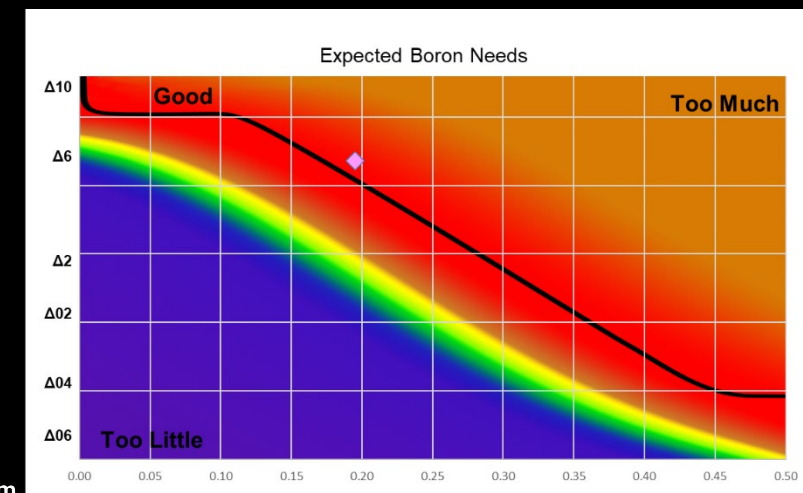
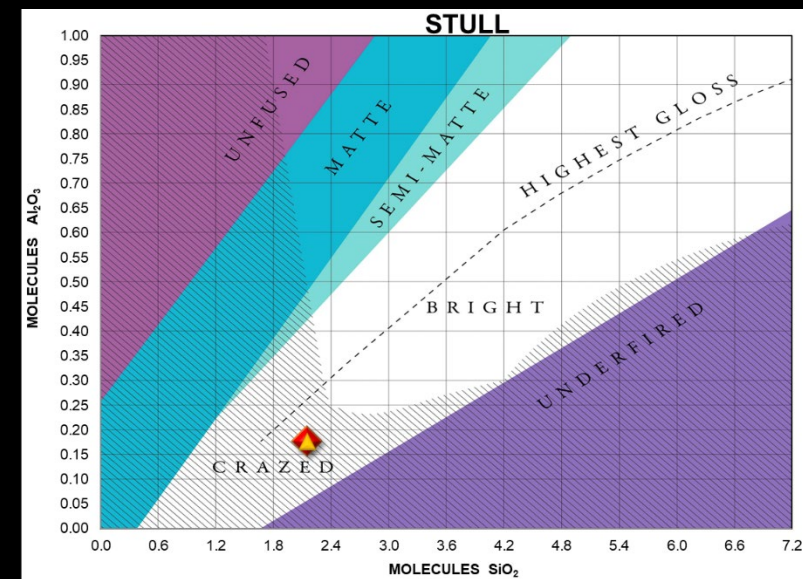
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Silicon Carbide-30 Mesh

SiO ₂ :Al ₂ O ₃ Ratio 11.22 : 1		Alkali Metals 0.23		Alkaline Earths 0.77	
SiO ₂ 1.99	Collective "Al ₂ O ₃ " 0.18	Na ₂ O 0.20	K ₂ O 0.03	MgO 0.25	CaO 0.51
B ₂ O ₃ 0.20	Al ₂ O ₃ 0.18	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



SiO ₂ :Al ₂ O ₃ Ratio 12.11 : 1		Alkali Metals 0.23		Alkaline Earths 0.77	
SiO ₂ 2.15	Collective "Al ₂ O ₃ " 0.18	Na ₂ O 0.20	K ₂ O 0.03	MgO 0.25	CaO 0.51
B ₂ O ₃ 0.20	Al ₂ O ₃ 0.18	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



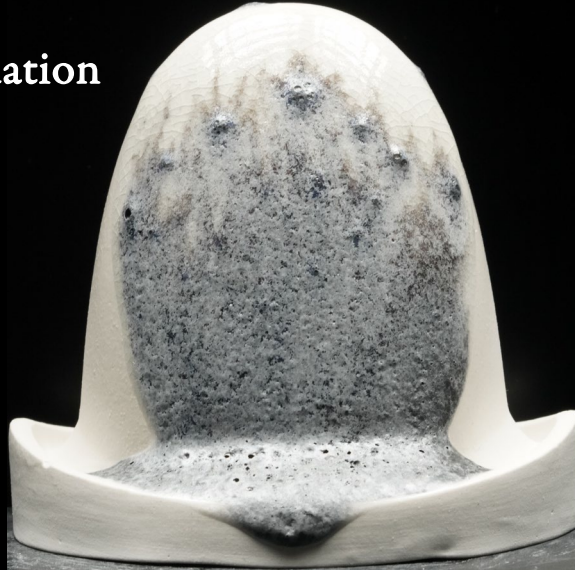
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Silicon Carbide-800 Mesh

Oxidation

Reduction

3%



1-3 Second Dip

2-3 Second Dips

1-3 Second Dip

2-3 Second Dips

9%



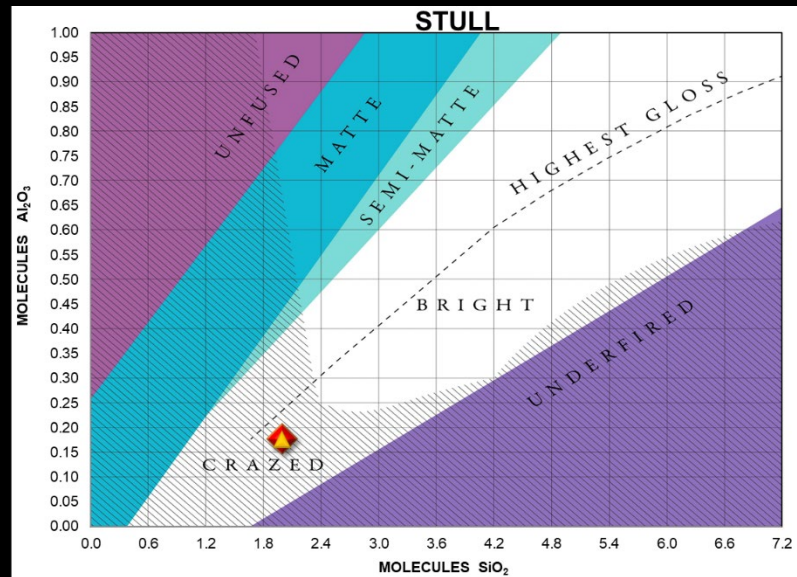
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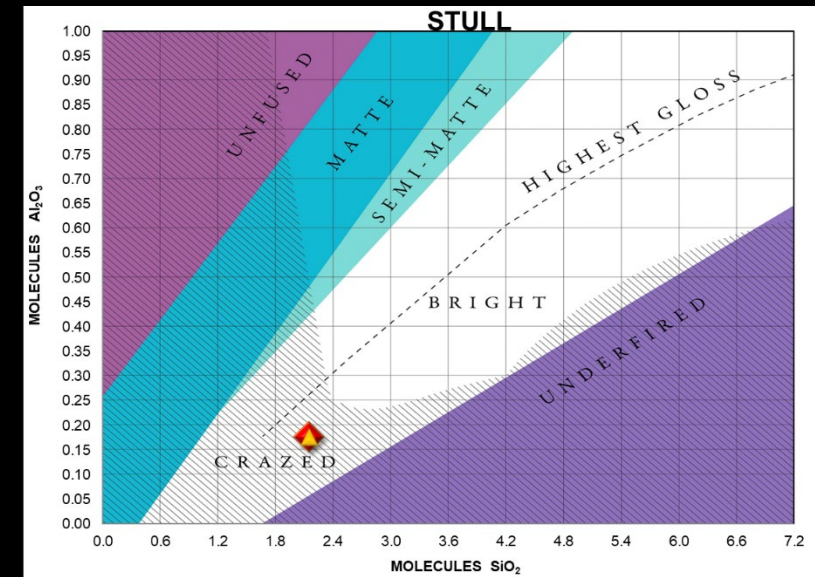
Silicon Carbide-800 Mesh

SiO ₂ :Al ₂ O ₃ Ratio 11.22 : 1		Alkali Metals 0.23		Alkaline Earths 0.77	
SiO ₂ 1.99	Collective "Al ₂ O ₃ " 0.18	Na ₂ O 0.20	K ₂ O 0.03	MgO 0.25	CaO 0.51
B ₂ O ₃ 0.20	Al ₂ O ₃ 0.18	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO

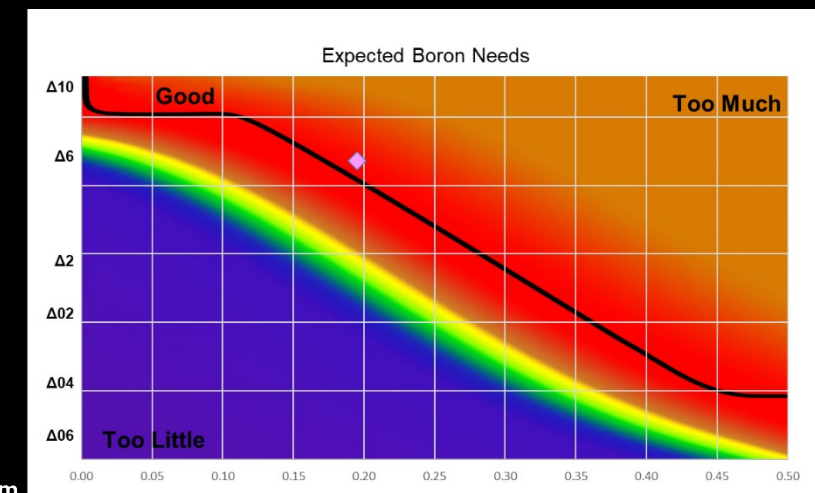


3%

SiO ₂ :Al ₂ O ₃ Ratio 12.11 : 1		Alkali Metals 0.23		Alkaline Earths 0.77	
SiO ₂ 2.15	Collective "Al ₂ O ₃ " 0.18	Na ₂ O 0.20	K ₂ O 0.03	MgO 0.25	CaO 0.51
B ₂ O ₃ 0.20	Al ₂ O ₃ 0.18	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



9%



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